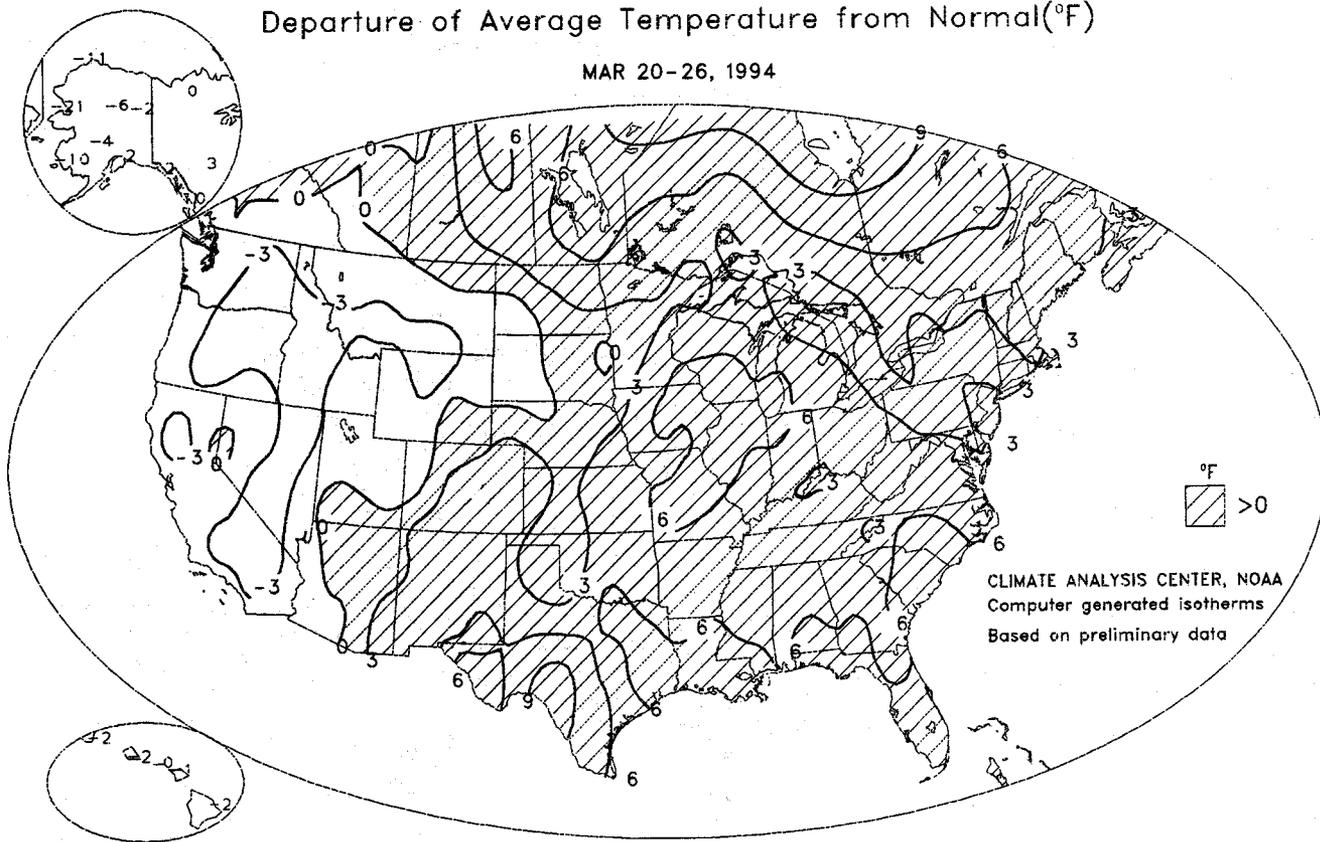


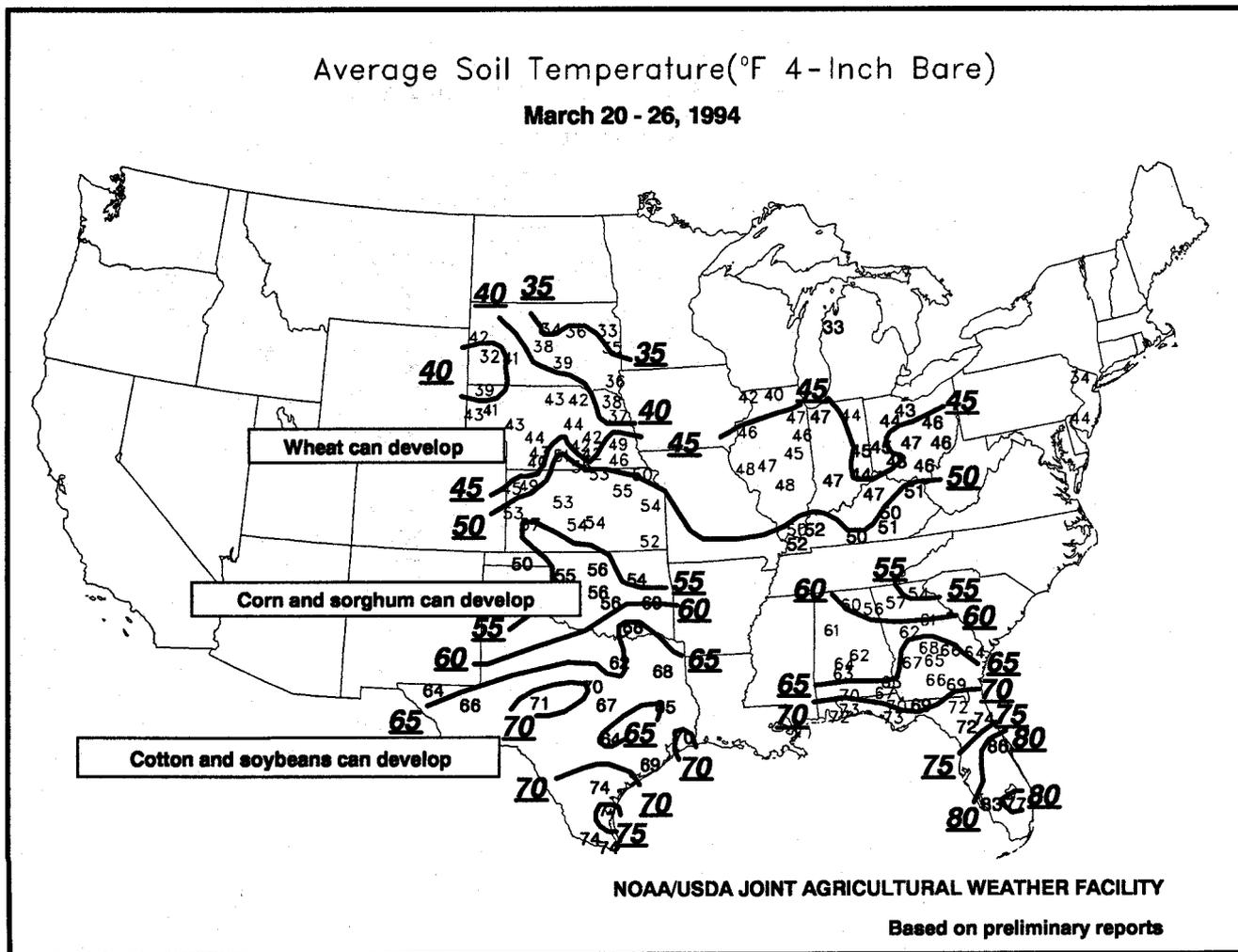
Departure of Average Temperature from Normal(°F)

MAR 20-26, 1994



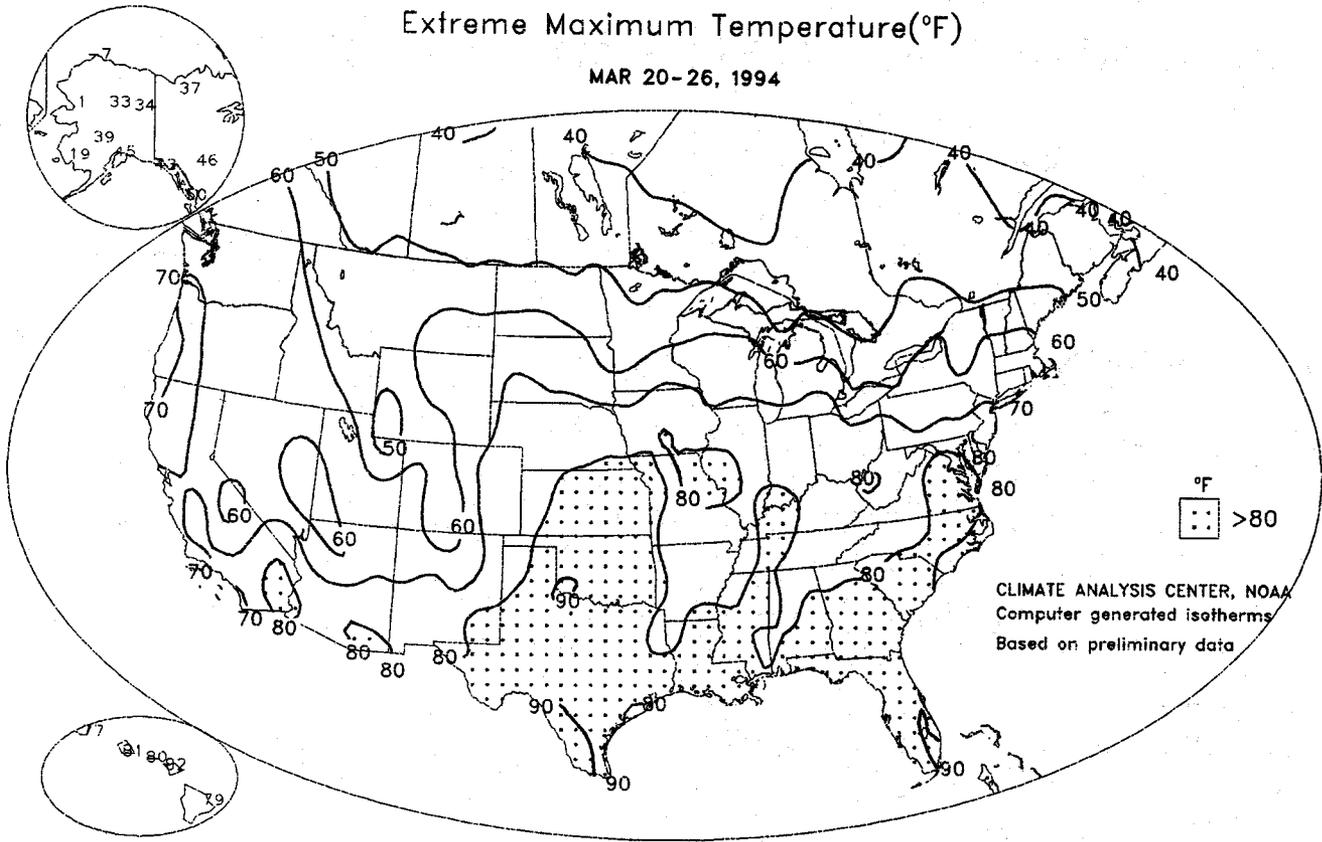
Average Soil Temperature(°F 4-Inch Bare)

March 20 - 26, 1994



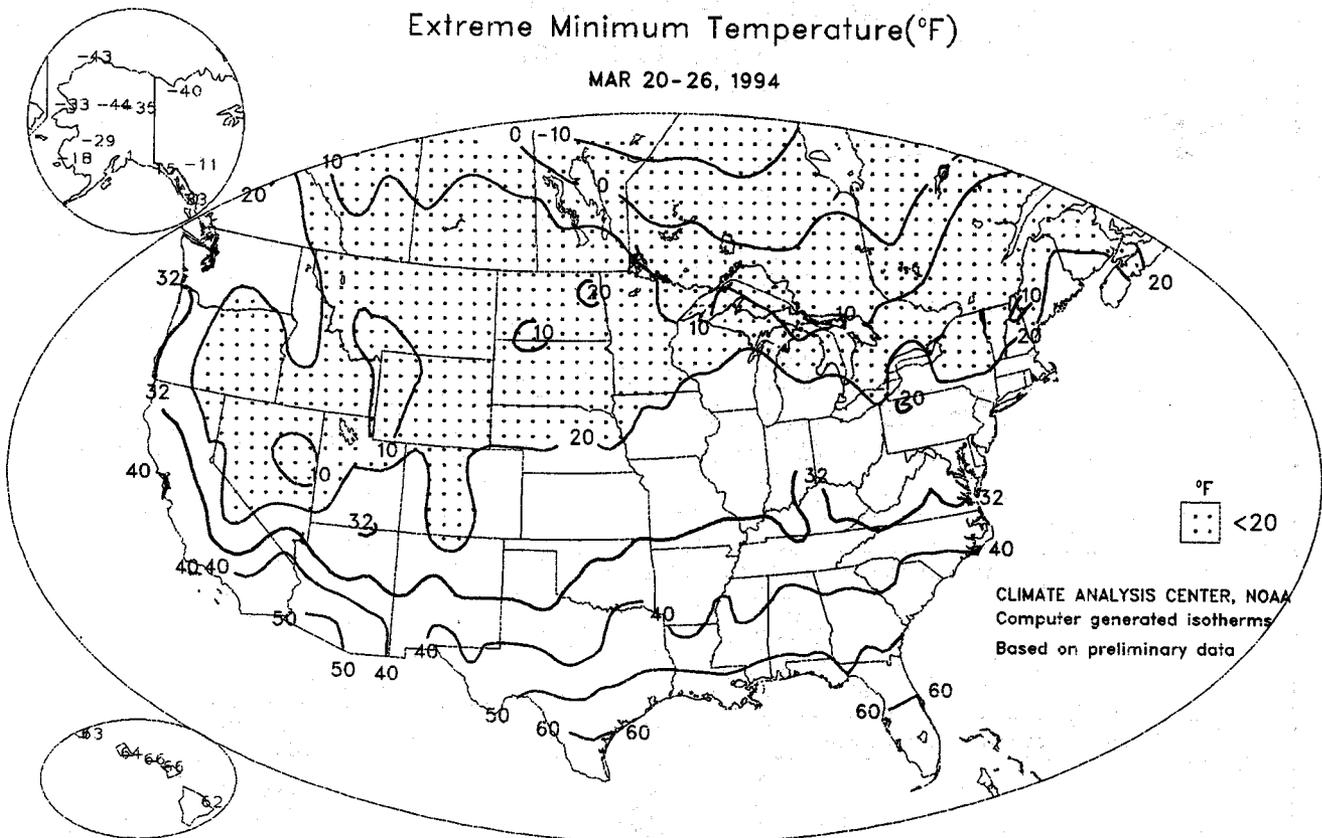
Extreme Maximum Temperature(°F)

MAR 20-26, 1994



Extreme Minimum Temperature(°F)

MAR 20-26, 1994



National Weather Data for Selected Cities

Weather Data for the Week Ending March 26, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	73	48	80	40	61	5	1.1	-.3	.8	4.3	83	14.2	94	91	48	0	0	3	1		
MOBILE	77	59	80	53	68	6	.4	-1.1	.3	3.9	71	11.8	75	98	51	0	0	2	0		
MONTGOMERY	75	55	81	48	65	7	1.9	.5	1.3	4.4	83	14.5	93	93	48	0	0	3	2		
AK ANCHORAGE	33	18	45	2	25	-2	.2	.1	.1	1.6	267	2.5	114	68	53	0	6	2	0		
BARROW	-18	-31	-7	-43	-24	-11	.5	.0	.5	1.2	.2	61	70	66	0	7	1	0	0		
FAIRBANKS	28	-1	47	-28	13	-2	.2	.1	.5	.3	55	1.0	79	75	38	0	7	1	1		
JUNEAU	40	32	48	24	36	2	.7	.0	.5	4.4	158	13.4	121	97	75	0	4	3	1		
KODIAK	38	27	45	10	32	-2	1.3	.3	.5	7.1	181	23.2	140	84	57	0	5	4	1		
NOME	0	-15	14	-24	-8	-18	.5	.1	.5	1.5	105	1.7	95	69	55	0	7	1	0		
AZ PHOENIX	73	53	80	49	63	0	.6	.5	.6	1.4	174	2.0	96	76	27	0	0	1	1		
PRESCOTT	57	35	64	32	46	2	.3	.1	.3	.5	29	1.8	39	84	35	0	1	3	0		
TUCSON	74	50	81	46	62	2	.4	.3	.3	1.1	190	2.2	101	78	24	0	0	2	0		
YUMA	76	56	83	50	66	0	.1	.1	.1	.2	95	.5	58	54	23	0	0	1	0		
AR FORT SMITH	71	47	82	38	59	5	.5	.4	.5	2.9	88	10.3	132	80	32	0	0	2	0		
LITTLE ROCK	69	52	76	42	60	4	1.4	.2	1.0	3.6	87	12.1	113	79	36	0	0	2	1		
CA BAKERSFIELD	66	44	73	34	55	-3	.2	.0	.2	1.0	110	2.9	103	56	25	0	0	1	0		
SUREA	56	41	62	37	49	-1	.9	-.3	.4	1.9	42	14.1	92	83	41	0	0	4	0		
FRESNO	66	44	73	38	55	-1	.2	-.2	.1	.5	32	3.7	68	79	25	0	0	2	0		
LOS ANGELES	63	51	66	45	57	-1	.7	-.3	.7	1.0	59	5.7	86	84	38	0	0	2	1		
REDDING	64	37	80	33	51	-2	.5	-.9	.5	1.2	30	10.9	76	80	34	0	0	0	0		
SACRAMENTO	64	39	70	33	52	-3	.0	-.5	.0	.5	0	3.2	36	89	40	0	0	0	0		
SAN DIEGO	63	53	65	49	58	-2	1.4	1.0	.8	3.6	241	7.1	146	83	48	0	0	4	1		
SAN FRANCISCO	59	46	64	39	52	-1	.2	-.4	.1	.2	9	8.0	79	86	37	0	0	3	0		
CO DENVER	59	32	73	28	46	5	.1	-.2	.1	.5	43	1.8	87	71	23	0	6	1	0		
GRAND JUNCTION	58	34	67	30	46	-1	.3	.0	.1	.3	28	1.0	53	83	24	0	4	5	0		
FORT COCKER	61	29	73	18	45	1	.2	.0	.2	1.1	166	1.8	140	68	24	0	5	1	0		
CT BRIDGEPORT	50	34	59	30	42	1	.8	-.1	.5	3.8	120	12.0	128	78	40	0	2	3	0		
HARTFORD	53	31	68	25	42	2	.8	-.1	.6	4.8	158	14.0	145	78	40	0	4	2	1		
DC WASHINGTON	64	39	83	33	52	2	1.0	.3	.6	4.8	179	13.3	164	85	34	0	0	4	1		
FL APALACHICOLA	78	62	84	55	70	8	1.4	.5	1.1	4.2	116	13.2	116	...	...	0	0	2	1
DAYTONA BEACH	82	61	86	57	71	6	.1	-.5	.1	3.2	131	11.5	138	100	58	0	0	1	0		
JACKSONVILLE	82	58	87	50	70	6	.8	-.1	.8	2.0	63	9.5	93	94	52	0	0	2	1		
KEY WEST	85	73	88	71	79	5	.5	-.4	.5	.3	23	4.9	94	91	70	0	0	0	0		
MIAMI	88	72	91	70	80	8	.1	-.5	.1	.5	24	9.7	160	90	53	2	0	1	0		
ORLANDO	85	65	89	61	75	7	.5	-.7	.5	1.0	36	8.6	106	97	55	0	0	1	0		
TALLAHASSEE	82	55	86	47	68	7	1.2	-.1	1.2	9.6	181	20.5	131	96	53	0	0	2	1		
TAMPA	84	67	86	60	75	8	.0	-.6	.0	.5	18	4.6	60	97	64	0	0	0	0		
WEST PALM BEACH	86	68	89	65	77	5	1.0	.3	.7	1.7	67	10.9	138	96	50	0	0	3	1		
GA ATLANTA	74	51	82	43	62	7	1.6	.3	1.5	4.5	91	13.3	92	87	47	0	0	4	1		
AUGUSTA	78	48	82	39	63	6	2.4	1.3	1.2	5.4	135	13.5	110	89	40	0	0	2	2		
MACON	79	50	85	43	65	6	1.0	.0	.5	4.6	112	12.9	96	92	43	0	0	3	1		
SAVANNAH	80	57	85	48	68	8	.2	-.6	.2	3.1	98	8.6	86	94	47	0	0	1	0		
HI HILO	74	65	79	62	70	-3	14.5	11.2	5.9	16.6	144	52.5	166	94	81	0	0	7	4		
HONOLULU	77	67	81	65	72	-3	3.2	2.7	1.8	3.2	171	10.6	139	82	62	0	0	2	2		
KAHULUI	77	67	82	66	72	-1	2.4	1.8	1.1	3.1	135	5.4	58	87	70	0	0	4	1		
LIHEU	74	67	77	63	71	-2	1.4	.4	.9	2.2	62	12.6	99	79	66	0	0	4	2		
ID BOISE	54	26	64	19	40	-4	.5	-.3	.5	.2	16	2.4	66	72	23	0	6	0	0		
LEWISTON	53	30	64	24	41	-4	.5	-.3	.5	.2	24	1.9	60	66	27	0	6	0	0		
POCAHELLO	50	22	58	14	36	-2	.1	-.2	.1	.1	10	2.0	67	83	30	0	6	1	0		
IL CHICAGO	59	38	74	32	48	8	.9	.3	.6	1.0	48	5.7	112	75	41	0	1	3	1		
MOLINE	59	37	79	30	48	8	.6	-.2	.3	.6	26	4.3	83	75	34	0	1	4	0		
PEORIA	61	38	80	30	50	7	.5	-.2	.5	.7	28	3.5	67	81	38	0	2	2	0		
QUINCY	61	40	81	25	50	7	.3	-.5	.3	...	...	...	70	37	0	2	1	0	
ROCKFORD	57	34	73	29	46	7	1.0	.4	.5	1.1	55	5.1	116	82	40	0	2	4	0		
SPRINGFIELD	63	39	80	28	51	7	.7	-.1	.7	1.2	45	3.4	57	73	34	0	1	1	1		
IN EVANSVILLE	65	39	81	31	52	2	.9	-.3	.7	1.9	45	7.4	70	81	37	0	1	2	1		
FORT WAYNE	60	33	75	30	47	6	.4	-.4	.2	1.5	65	5.1	82	84	43	0	4	4	0		
INDIANAPOLIS	61	35	77	30	48	4	.4	-.5	.2	.9	28	4.9	62	82	39	0	2	3	0		
SOUTH BEND	58	33	75	27	46	6	.6	-.2	.3	.7	29	4.7	70	79	40	0	4	5	0		
IA DES MOINES	61	33	82	23	47	7	.1	-.5	.1	.1	7	3.0	82	78	31	0	3	2	0		
SIOUX CITY	56	26	75	17	41	2	.5	-.5	.5	.5	2	1.8	62	85	33	0	7	1	0		
WATERLOO	57	32	74	21	45	7	.1	-.5	.1	.1	7	2.3	62	88	40	0	2	1	0		
KS CONCORDIA	62	34	83	25	48	4	.5	-.5	.5	.5	2	.9	27	73	26	0	4	1	0		
DODGE CITY	63	33	81	25	48	2	.5	-.4	.5	.5	0	.8	35	70	28	0	4	0	0		
GOODLAND	60	30	77	26	45	4	.0	-.3	.0	.2	25	.7	38	70	25	0	6	0	0		
TOPEKA	64	37	82	25	51	4	.1	-.6	.1	.2	8	1.4	36	72	32	0	3	1	0		
NICHITA	65	40	81	31	52	4	.3	-.4	.3	...	...	...	74	31	0	1	1	0	
KY BOWLING GREEN	68	39	80	29	54	4	.2	-1.0	.2	5.1	118	16.9	138	91	41	0	1	2	0		
LEXINGTON	63	38	77	34	51	3	1.1	-.1	.8	5.3	143	14.2	145	77	43	0	0	3	1		
LOUISVILLE	64	40	80	33	52	3	1.4	-.4	1.1	3.1	79	10.1	100	80	39	0	0	5	1		
LA BAYON ROUGE	78	60	83	52	69	5	.3	-.8	.3	3.6	89	13.2	91	98	67	0	0	2	0		
LAKE CHARLES	78	62	81	56	70	8	.5	-.7	.5	1.9	67	7.2	66	97	63	0	0	0	0		
NEW ORLEANS	80	61	84	52	70	7	.5	-.1	.5	4.1	98	7.9	52	95	53	0	0	0	0		
SHREVEPORT	77	53	81	41	65	6	.5	-.9	.5	2.5	72	11.1	94	92	45	0	0	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending March 26, 1994

STATES AND STATIONS	TEMPERATURE °F							PRECIPITATION							RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE		MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW
															90 AND ABOVE			32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	39	28	43	21	34	6	.8	.2	.5	2.3	115	7.4	116	87	55	0	6	5	1	
PORTLAND	46	31	54	26	38	3	3.2	2.4	3.2	5.9	194	12.6	127	86	55	0	5	3	1	
MD BALTIMORE	63	37	80	30	50	4	.9	.1	.6	5.7	198	14.3	158	80	34	0	3	2	1	
SALISBURY	63	37	78	30	50	3	1.5	.5	.8	6.1	172	14.7	139	89	41	0	2	3	2	
MA BOSTON	52	35	67	29	44	3	1.3	.5	.8	6.2	200	14.3	139	79	43	0	2	3	1	
CHATHAM	46	35	52	29	41	2	1.3	.5	.9	5.4	168	14.6	135	89	58	0	2	3	1	
MI ALPENA	44	23	60	14	33	2	.7	.2	.6	1.1	61	4.1	87	87	52	0	7	2	1	
DETROIT	55	32	73	26	44	5	1.2	.6	.9	1.8	88	6.0	107	80	39	0	4	4	1	
FLINT	54	29	71	21	42	5	.6	.1	.6	1.4	82	4.1	92	86	44	0	6	4	1	
GRAND RAPIDS	53	31	66	26	42	6	.9	.3	.6	1.4	64	5.7	106	82	44	0	4	3	1	
HOOPTON LAKE	46	24	57	11	35	4	.6	.1	.5	1.6	98	4.9	114	84	45	0	7	3	1	
LANSING	55	29	71	21	42	7	1.0	.4	.7	1.7	93	4.6	104	92	42	0	6	3	1	
MARQUETTE	40	21	56	14	30	4	1.5	.9	1.0	2.0	87	4.2	67	85	48	0	7	4	1	
MUSKOGON	52	33	62	27	42	6	.9	.3	.6	1.3	61	6.6	111	84	47	0	4	4	1	
SAULT ST. MARIE	37	17	52	9	27	0	.7	.1	.4	1.5	77	4.6	76	94	58	0	7	2	0	
NH ALEXANDRIA	40	24	53	12	32	2	.5	.1	.3	.5	42	1.4	53	94	59	0	7	2	0	
DUDNH	39	23	50	8	31	3	.7	.2	.3	.8	53	3.3	92	88	41	0	7	7	0	
INT'L FALLS	39	22	51	15	31	5	.3	.0	.2	.6	66	1.4	58	83	38	0	7	7	0	
MINNEAPOLIS	48	27	65	19	38	3	.3	.2	.1	.3	19	2.3	67	87	39	0	5	5	0	
ROCHESTER	51	28	67	20	40	7	.1	.3	.1	.2	14	2.1	72	85	42	0	5	5	0	
MS GREENWOOD	75	51	81	41	63	6	.3	-1.1	.2	4.0	83	10.9	76	89	43	0	0	0	0	
JACKSON	74	51	79	39	62	5	1.1	-1.3	.9	4.4	89	18.9	124	95	55	0	0	0	0	
MERIDIAN	76	53	80	42	64	6	.8	-1.3	.6	4.9	86	19.6	120	94	53	0	0	0	0	
MO CAPE GIRARDEAU	67	42	77	33	54	4	2.1	.9	1.4	4.3	102	11.7	112	87	34	0	0	0	0	
COLUMBIA	64	41	82	26	52	8	.9	-1.1	.9	1.3	50	4.2	72	74	32	0	1	1	1	
KANSAS CITY	63	38	84	27	50	5	.2	.5	.2	1.3	13	2.4	56	72	31	0	3	3	0	
SAINT LOUIS	66	45	83	32	55	8	.8	-1.1	.8	1.2	41	4.8	70	76	29	0	1	1	0	
SPRINGFIELD	65	43	77	31	54	6	1.7	.8	1.7	3.0	95	7.2	105	74	31	0	1	1	0	
MT BILLINGS	42	25	62	13	33	-4	.5	.2	.4	.5	37	1.3	50	70	44	0	6	6	0	
GLASGOW	44	24	58	17	34	1	.1	.0	.1	.2	48	1.2	125	90	40	0	7	3	0	
GREAT FALLS	44	21	51	15	32	-3	.1	.1	.2	.2	20	1.2	51	90	31	0	7	2	0	
HAVRE	45	22	54	18	34	0	...	...	...	...	...	...	90	90	31	0	7	7	0
HELENA	43	22	51	15	33	-3	.3	.1	.3	.3	51	.9	55	91	41	0	7	2	0	
KALISPELL	45	22	51	17	33	-2	.2	.2	.2	.1	8	2.1	60	85	35	0	7	2	0	
MILES CITY	44	25	62	20	34	-2	.3	.1	.2	.3	67	1.4	95	89	47	0	7	2	0	
MISSOULA	47	21	54	16	34	-3	.1	-1.1	.1	.5	62	1.3	46	90	35	0	7	2	0	
NH GRAND ISLAND	58	27	75	21	42	2	0	.5	.0	T	0	1.9	69	78	31	0	6	0	0	
LINCOLN	60	30	78	18	45	3	T	.5	T	T	1	4	31	79	30	0	5	1	0	
NORFOLK	57	26	78	19	41	3	T	.5	T	T	0	1.6	58	83	32	0	7	0	0	
NORTH PLATTE	59	24	76	19	42	3	T	.3	T	T	2	.8	48	82	23	0	7	0	0	
OMAHA	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SCOTTSBLUFF	55	24	71	17	40	2	.0	.3	.0	.7	82	2.1	114	75	23	0	7	0	0	
VALENTINE	51	21	70	15	36	-3	.1	.3	.0	.1	11	.9	42	81	31	0	7	2	0	
NV ELY	48	19	56	4	33	-3	.4	.2	.2	.9	114	2.6	119	88	37	0	7	3	0	
LAS VEGAS	68	46	76	37	57	-1	.1	.1	.1	.1	35	.7	50	60	21	0	0	1	0	
RENO	56	33	65	24	45	1	T	.1	T	1.0	165	1.7	63	65	22	0	4	0	0	
WINNEVOCCA	57	27	65	12	42	1	T	.2	T	.4	60	1.6	80	66	16	0	5	0	0	
NH CONCORD	48	27	61	23	38	2	1.2	.6	1.0	4.4	194	8.7	119	87	40	0	6	2	1	
NJ ATLANTIC CITY	59	35	77	24	47	3	1.3	.5	1.0	6.1	202	13.8	144	82	36	0	3	3	1	
NH ALBUQUERQUE	66	41	72	36	53	5	T	.1	T	.5	109	.8	55	57	18	0	0	2	0	
CLOVIS	67	39	76	31	53	3	T	.1	T	.5	100	.7	53	63	22	0	1	0	0	
ROSWELL	73	45	82	37	59	5	T	.1	T	.4	135	.4	40	54	18	0	0	0	0	
NY ALBANY	50	27	63	19	39	2	.8	.1	.4	3.7	150	8.7	123	84	42	0	7	2	0	
BINGHAMTON	46	30	60	20	38	3	.9	.2	.9	4.5	192	9.8	138	77	43	0	4	4	1	
BUFFALO	50	31	67	22	40	4	.6	.0	.6	2.2	100	6.6	90	78	50	0	4	2	1	
NEW YORK	55	39	70	33	47	3	1.1	.2	.7	4.5	151	12.1	136	67	35	0	0	3	1	
ROCHESTER	50	29	68	23	39	2	.4	.1	.4	1.3	66	5.6	92	80	49	0	4	1	0	
SYRACUSE	46	27	62	18	37	0	.9	.2	.9	4.3	186	9.6	141	87	56	0	7	1	1	
NC ASHEVILLE	67	40	76	32	53	3	.7	.6	.3	2.4	50	12.9	98	90	42	0	1	4	0	
CHARLOTTE	74	49	79	41	62	9	.7	.3	.5	2.7	72	8.9	79	75	35	0	0	3	0	
GREENSBORO	68	44	76	34	56	5	.3	.5	.2	2.5	81	8.7	90	82	28	0	0	2	0	
HATTERAS	65	47	75	40	56	3	.8	.2	.7	5.9	163	16.4	125	85	55	0	0	3	1	
NEW BERN	72	47	79	39	60	4	.8	.0	.7	5.1	154	12.9	108	93	45	0	0	2	1	
RALEIGH	71	45	79	35	58	6	1.0	.2	.5	3.9	120	10.4	100	85	35	0	0	4	0	
WILMINGTON	74	50	80	41	62	7	1.8	.8	1.8	7.7	204	18.0	140	98	48	0	0	1	1	
ND BISMARCK	43	19	62	5	31	-1	.6	.4	.4	.6	108	1.7	111	95	50	0	7	3	0	
FARGO	41	24	53	13	32	3	.8	.5	.6	.9	107	2.2	112	92	55	0	7	4	1	
GRAND FORKS	39	27	52	23	33	6	.1	-1.1	.1	.3	45	1.6	83	91	56	0	6	1	0	
WILLISTON	43	23	58	20	33	1	.1	-1.1	.1	.1	13	1.9	128	86	41	0	7	1	0	
OH AKRON-CANTON	56	30	72	22	43	2	1.3	.5	1.1	2.5	90	7.6	107	84	42	0	4	3	1	
CINCINNATI	61	36	74	32	48	3	.5	.5	.3	1.7	49	6.6	75	79	38	0	2	2	0	
CLEVELAND	56	32	73	23	44	4	.4	.3	.4	1.0	43	4.4	67	81	36	0	3	2	0	
COLUMBUS	60	31	75	25	45	5	.5	.3	.2	1.4	54	6.8	99	84	39	0	4	4	0	
DAYTON	60	34	74	28	47	4	.4	.5	.2	1.4	50	6.5	90	82	36	0	2	4	0	

Based on 1961-90 normals.

Weather Data for the Week Ending March 26, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	56	33	73	26	45	6	.8	.1	.4	1.8	81	6.5	115	81	44	0	3	4	4	0	
YOUNGSTOWN	55	31	72	19	43	4	1.3	.6	1.2	3.3	127	7.6	112	83	38	0	4	4	1	1	
OK OKLAHOMA CITY	71	45	87	35	58	5	.6	.0	.6	3.6	160	6.4	129	74	34	0	0	1	1	1	
TULSA	70	46	86	32	58	5	.9	.0	.9	3.2	112	6.1	96	79	32	0	1	1	1	1	
OR ASTORIA	55	37	72	32	46	0	1.7	.2	.8	6.3	104	24.4	103	87	54	0	1	4	2	2	
BURNS	50	20	62	13	35	3	1.0	.2	1.0	.2	19	.9	36	73	24	0	7	0	0	0	
MEDFORD	61	30	78	24	46	0	1.3	.4	.3	18	2.6	41	76	33	0	5	1	2	0		
PENDLETON	54	29	63	23	41	2	1.7	.2	.4	43	3.7	101	74	23	0	6	2	0	0		
PORTLAND	58	37	73	35	47	1	1.6	.1	.5	1.5	50	10.0	81	81	29	0	0	3	0		
SALEM	59	36	74	32	48	1	1.7	.1	.4	1.8	51	10.3	74	82	33	0	1	4	0		
PA ALLENTOWN	54	33	67	26	43	3	1.7	.1	.7	4.3	156	13.1	148	78	39	0	2	1	1		
ERIE	50	31	65	20	40	2	1.5	.2	.3	2.6	103	6.5	93	79	44	0	3	2	0		
HARRISBURG	56	37	73	33	46	3	1.6	.1	.6	4.3	156	13.1	154	71	39	0	0	2	1		
PHILADELPHIA	61	38	77	33	49	6	.8	.0	.8	4.5	156	12.1	128	77	34	0	0	2	1		
PITTSBURGH	58	33	75	23	46	4	1.3	.5	1.1	4.5	158	10.5	136	79	37	0	4	3	1		
SCRANTON	53	33	66	25	43	3	.8	.2	.8	2.9	138	7.2	112	73	35	0	4	2	1		
RI PROVIDENCE	55	35	69	30	45	5	1.2	.3	1.1	5.6	166	13.3	122	78	37	0	2	2	1		
SC CHARLESTON	78	55	92	44	66	6	.1	.9	.0	3.9	105	12.7	121	87	44	0	0	2	0		
COLUMBIA	79	48	84	38	64	7	1.3	.2	.7	3.5	85	11.7	93	83	33	0	0	2	2		
FLORENCE	79	50	83	42	64	7	1.3	.3	1.0	3.4	97	10.3	101	86	36	0	0	2	1		
GREENVILLE	72	44	78	36	58	4	1.5	.3	.9	3.3	72	11.0	84	82	33	0	0	4	1		
SD ABERDEEN	45	26	65	16	36	3	1.3	.0	.2	.4	39	1.6	76	89	43	0	5	3	0		
HURON	48	24	66	17	36	1	.1	.3	.1	.2	16	1.9	77	86	40	0	7	2	0		
RAPID CITY	49	23	71	12	36	0	.1	.2	.1	.2	22	1.3	76	76	32	0	6	2	0		
SIOUX FALLS	48	24	63	15	36	1	.2	.3	.1	.2	11	1.8	72	89	42	0	7	2	0		
TN CHATTANOOGA	68	42	77	36	55	3	1.5	.1	1.0	4.3	84	18.0	122	94	44	0	0	5	1		
KNOXVILLE	68	42	79	36	55	4	1.6	.5	.8	4.8	111	20.7	165	92	50	0	0	5	1		
MEMPHIS	71	51	77	41	61	6	2.2	.9	1.9	4.4	98	14.3	113	84	40	0	0	3	1		
NASHVILLE	70	44	79	34	57	4	1.5	.4	.7	4.7	116	15.3	133	82	41	0	0	6	2		
TX ABILENE	79	49	88	34	64	6	.7	.3	.7	.1	7	1.9	59	80	24	0	0	0	0		
AMARILLO	66	37	78	26	52	3	.0	.2	.0	.9	106	2.0	103	60	26	0	2	0	0		
AUSTIN	79	60	83	50	69	6	.1	.3	.1	1.6	105	5.2	96	89	52	0	0	2	0		
BEAUMONT	79	62	83	55	71	8	.7	.7	.7	3.6	131	11.8	108	96	62	0	0	0	0		
BROWNSVILLE	83	68	85	65	76	5	.7	.1	.7	1.8	428	4.3	140	95	50	0	0	0	0		
CORPUS CHRISTI	81	67	86	61	74	7	.7	.2	.7	3.5	436	5.5	124	96	52	0	0	1	0		
DEL RIO	84	64	88	55	74	10	.7	.2	.7	2.5	287	5.2	155	79	42	0	0	1	0		
EL PASO	75	53	80	47	64	7	.7	.1	.7	.4	148	.6	59	50	20	0	0	0	0		
FORT WORTH	76	53	85	39	65	7	.3	.4	.3	1.6	65	5.1	75	85	48	0	0	2	0		
GALVESTON	75	66	79	63	71	7	.7	.5	.7	1.6	88	4.2	57	99	70	0	0	0	0		
HOUSTON	79	61	83	53	70	8	.7	.7	.7	2.2	84	7.1	71	95	59	0	0	1	0		
LUBBOCK	73	43	83	34	58	4	.0	.2	.0	.2	24	.7	42	75	20	0	0	0	0		
MIDLAND	79	49	85	41	64	6	.0	.1	.0	.7	0	1.1	77	84	22	0	0	0	0		
SAN ANGELO	84	54	89	43	69	9	.7	.2	.7	.7	5	2.1	79	82	21	0	0	0	0		
SAN ANTONIO	81	61	84	53	71	8	.7	.3	.7	3.6	286	5.8	121	86	49	0	0	2	0		
VICTORIA	78	62	81	56	70	6	.1	.4	.1	4.7	251	7.0	87	95	54	0	0	1	0		
WACO	77	54	85	40	65	5	.7	.1	.6	1.5	76	6.1	109	90	55	0	0	2	1		
WICHITA FALLS	74	46	89	33	60	4	.0	.6	.0	1.1	52	2.9	55	82	32	0	0	0	0		
UT CEDAR CITY	53	30	59	21	41	0	.6	.3	.3	1.2	106	2.6	94	85	33	0	0	0	0		
SALT LAKE CITY	52	29	63	21	41	-3	.5	.0	.4	1.1	72	3.3	84	88	31	0	5	3	0		
VT BURLINGTON	46	28	57	21	37	3	.4	.1	.4	2.5	138	6.0	113	83	51	0	7	2	0		
VA NORFOLK	68	45	82	34	57	6	1.8	.9	1.0	9.3	297	17.1	165	82	40	0	0	3	2		
RICHMOND	67	40	83	29	54	3	.9	.1	.5	4.8	157	12.3	130	81	28	0	1	2	0		
ROANOKE	66	41	80	31	54	5	.5	.3	.4	3.0	102	12.9	150	69	29	0	1	3	0		
WA QUILLAUTE	52	33	64	28	43	-1	1.6	.9	1.0	10.4	106	38.2	104	91	51	0	5	3	1		
SEATTLE-TACOMA	53	26	66	31	44	-2	.7	.0	.5	3.2	105	10.2	82	81	53	0	1	3	0		
SPOKANE	49	25	61	21	37	-3	.1	.2	.1	.5	38	2.7	57	86	37	0	7	2	0		
YAKIMA	56	23	71	17	40	-5	.7	.1	.7	.7	5	1.4	57	87	28	0	7	2	0		
WV BECKLEY	61	37	73	25	49	5	1.4	.6	1.0	4.5	158	14.3	164	79	33	0	4	4	1		
CHARLESTON	66	38	84	28	52	4	.7	.2	.3	5.2	170	17.2	191	80	29	0	2	4	0		
HUNTINGTON	65	39	79	29	52	6	.8	.0	.4	6.5	219	16.3	181	73	30	0	3	3	0		
PARKERSBURG	62	36	76	25	49	4	.7	.1	.7	3.4	107	14.7	159	77	31	0	4	2	1		
WI GREEN BAY	47	30	65	34	39	6	.5	.0	.3	.8	47	3.4	87	86	50	0	4	4	0		
LACROSSE	54	33	72	23	44	7	.4	.1	.2	.5	26	4.7	118	84	38	0	3	3	0		
MADISON	55	32	68	24	44	7	.4	.1	.2	.5	26	4.7	118	84	38	0	3	3	0		
MILWAUKEE	49	34	66	27	41	6	1.0	.3	.7	1.1	49	6.8	130	84	45	0	2	3	1		
WAUSAU	47	30	64	20	38	6	.2	.3	.1	.4	24	1.9	55	89	36	0	4	5	0		
WY CASPER	48	24	61	12	36	1	.3	.1	.2	.5	63	1.9	101	82	35	0	5	4	0		
CHEYENNE	48	24	64	17	36	1	.1	.2	.1	.4	53	2.0	123	79	28	0	6	3	0		
LANDER	45	23	57	16	34	-2	.4	.1	.3	.9	100	2.2	113	82	32	0	7	2	0		
SHERIDAN	42	21	64	12	32	-4	.4	.1	.2	.6	79	3.6	165	87	46	0	7	2	0		

Based on 1961-90 normals.

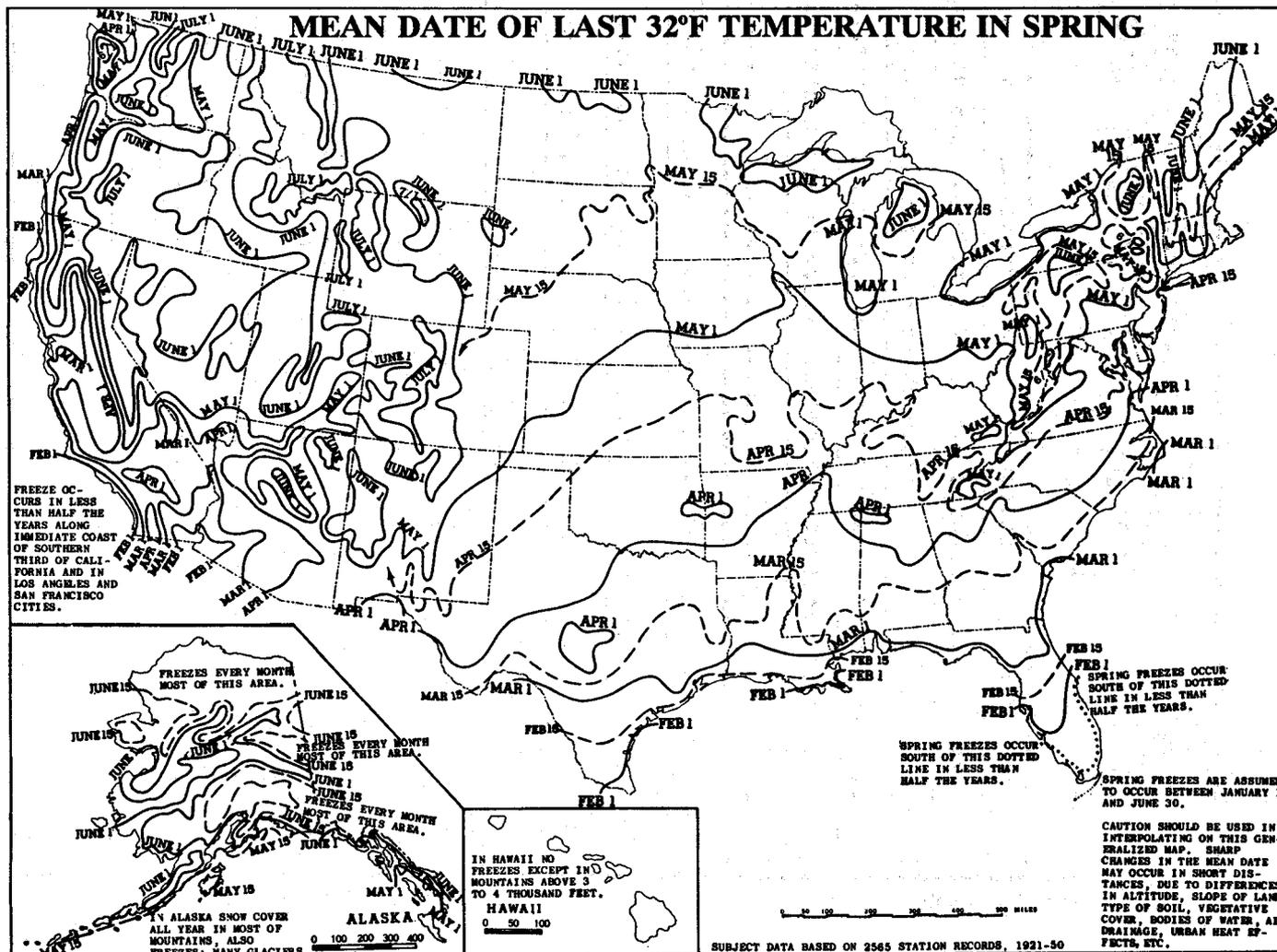
National Agricultural Summary

March 21 - 27, 1994

HIGHLIGHTS: Warm, windy weather dried fields and pastures early in the week in the central Great Plains, which resulted in wildfires. Precipitation along the Pacific Coast was insufficient to restore soil moisture to normal levels. Rain, snow, and cold, wet soil in the Great Lakes region left fieldwork on hold. Soaking rains and wet conditions delayed fieldwork in the Tennessee Valley late in the week. Warm weather, early in the week, allowed plowing and discing to continue in parts of the Ohio Valley. Warm, dry conditions along the Gulf Coast allowed spring planting to progress.

SMALL GRAINS: Spring showers greened winter grains in the Pacific Coastal region. Farmers completed spring wheat seeding in the Columbia Basin. Some Russian wheat aphids were reported in Oregon in the lower elevations. Cool weather slowed wheat development in the northern Plains. North Dakota's soil moisture was significantly above last year's at this time with 32-percent surplus reported. Mild weather improved small grains in Texas, but more moisture was still needed. Irrigation started on wheat fields in Kansas, and some wind damage was reported on late-planted wheat. Winter wheat jointing was ahead of the 5-year average, and slight insect infestations were reported in southern Kansas.

FIELD CROPS: Windy, dry weather allowed field preparation to advance in the Midwest. Farmers reported some corn planting along the southern edge of the Corn Belt and in the Bootheel of Missouri. Corn emerged in southern Georgia, though some replanting was possible due to the heavy rains. Corn planting was ahead of schedule in the Delta, as fields dried and warm weather continued. Cotton planting continued in south Texas, but was delayed in the central part of the State, due to low soil temperatures. Weather conditions delayed cotton planting in Arizona, but progress remained ahead of last year. California cotton growers planted in the desert region but were waiting for warmer soil in the San Joaquin Valley.



State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall 2.19 to 8.18 in. north; 1.93 to 8.88 in. central; 0.81 to 3.50 in. south. Temperatures 1° below normal to 8° above normal north, central; 4 to 10° above normal south. Lows 32 to 47° north; 35 to 48° central; 43 to 54° south. Highs 75 to 85° north; 74 to 88° central; 82 to 86° south.

Days suitable for fieldwork 4.8. Soil moisture 6% short, 61% adequate, 33% surplus. Percent acreage prepared 45%, 32% 1993, 37% avg. Corn planted 26%, 16% 1993, 34% avg. Wheat headed 17%, 6% 1993, 16% avg.; 41% fair, 55% good, 4% excellent. Pasture 12% poor, 55% fair, 33% good. Livestock 5% poor, 49% fair, 46% good. Primary activities: spring plowing, general care of livestock, poultry, catfish.

ARIZONA: Temperatures mostly above normal; 2° below to 6° above. Extremes 24°; 78° higher elevations; 34°; 85° deserts. Precipitation reported at all stations. Rainfall 0.07 to 1.01 in.

Weather conditions delay cotton planting; to date 13%, 7% 1993, 15% avg. Small grain jointing 93%, 90% 1993, 87% avg.; heading 40%, 33% 1993, 36% avg. Condition is rated mostly good. Alfalfa condition continues good. Harvest progress moderate, sheeping off activities light; stand renovation, new stand establishment normal. Weed, insect, disease infestations moderate. Citrus harvest continues. Grapefruit, lemons, navel, sweet, valencia oranges available central, western areas. Tangerines, tangelos also available central area. Winter vegetable harvest continues active. Available from western, central areas: Bok choy, broccoli, cauliflower, cilantro, kale, boston, iceberg, leaf, romaine lettuce, parsley, spinach. Western harvest also included anise, artichokes, asparagus, broccoflower, celery, endive, escarole, napa, salad savoy. Central crops available: beets, cabbage, carrots, dill, fava beans, green onions, kohlrabi, leeks, mixed greens, radishes, rappini, rutabagas, swiss chard, turnips. Tomatoes remain available eastern areas.

ARKANSAS: Warm week with showers over weekend, heavy in northeast. Temperatures a few degrees above normal. Extreme 26°; 83°. Precipitation 0.41 to 4.36 in.

Days suitable for fieldwork 6. Soil moisture supplies adequate to surplus. Wheat 18% poor, 38% fair, 44% good. At joint stage with nitrogen application continued some areas. Corn 42% planted, last year 12%. Cotton bed preparation 80% complete. Peaches in full bloom. Livestock, pastures good. Pastures being fertilized.

CALIFORNIA: Light precipitation northern areas. Minimum temperatures 23rd morning below freezing in some valley locations. Light precipitation with snow Sierras began 24th, spread into southern areas. Southern coast again received significant rain.

Good progress field activities despite scattered light rain. Small grains grew rapidly; heading central, south. Fertilizer, herbicides applied; irrigation some areas. Rice fields prepared for planting, stubble burned where conditions, air quality regulations allowed. Seedbed preparation for planting corn, cotton, dry beans, safflower gained momentum. Cotton planting active desert areas. San Joaquin Valley cotton growers waited higher soil temperatures before planting. Over-wintered sugarbeets harvested; new crop fields cultivated, fertilized, irrigated, sprayed weeds. Alfalfa, oats, sudangrass, winter forage cut hay, greenchopped central, south. Planted early safflower, dry beans desert areas. Stone fruit growers treated orchards for scale, twig borer, thrip. Late varieties fruit, nuts broke dormancy. Early blooming varieties leafed out, set fruit. Cherry orchards full bloom. Grapes leafing out, being irrigated. Lemon picking central valley, south coast areas active. Navel oranges, 75% picked. Valencia oranges being picked, desert area. Artichokes harvested central coast, Riverside County. Harvest asparagus picked up speed through out central valley, good quality. Harvest broccoli, cabbage continued San Joaquin, Imperial Valleys. Carrots packed Riverside County. Cauliflower harvested desert valleys. Garlic, onion fields treated weeds Fresno County. Head lettuce fields harvested central, desert valleys good quality. Lettuce Tulare County making excellent progress. Melon fields planted desert valleys, while field work continued Fresno County. Peppers

planted central valley. Spring potatoes progressing well Kern County. Processing spinach harvested Tulare County. Fresh market tomatoes transplanted prepared fields central, desert valleys. Processing tomato fields planted Stanislaus County. Sweet corn, beans, okra, squash developing well around State. Other crops being harvested: Beets, taro root, turnips, oriental vegetables. Rangeland, pasture remained fair to good. Rain needed to sustain spring growth. Some south facing slopes started to turn brown. Feed and water plentiful. Supplemental feeding light. Livestock good condition.

COLORADO: High pressure dominated the weather for the first half of the week before several cold fronts dropped temperatures, brought precipitation for the latter half of the week. The 23rd was windy across the Front Range. Heavy snow fell in the southern mountains on the 24th through the 26th with amounts up to 2 ft. Snowfall elsewhere was somewhat lighter with 1 to 3 in. across the Front Range on the 26th. Less than 0.10 in. of rain fell in the west on the 24th, 25th with up to 0.50 in. northern mountains. Cool, moist weather persisted on the 27th with areas in the south, southeast receiving 0.10 to 0.30 in. of precipitation. With the early-week warmth, temperatures for the period were 6 to 10° above normal.

Days suitable for fieldwork 5.0. Soil moisture 6% very short, 47% short, 45% adequate, 2% surplus. Spring barley 22% seeded, 14% 1993, 17% avg. Oats 24% seeded, 7% 1993, 14% avg. Dry onions 30% planted, 14% 1993, 19% avg. Sugarbeets 3% planted, 4% 1993, 4% avg. Spring wheat 6% planted, 2% 1993, 4% avg. Winter wheat 5% pastured, 4% 1993, 7% avg. Winter wheat condition 2% very poor, 10% poor, 23% fair, 47% good, 18% excellent. Because of freezing temps. on the West Slope the evening of the 27th there is a chance for damage to early peach varieties, apricots. The extent of the damage will be known later this week. Cows calved 64%, 60% last year, 57% avg. Ewes lambed 73%, 69% 1993, 64% avg. Calving and lambing losses reported less than average. Livestock good to excellent. Pasture, range feed condition mostly fair.

FLORIDA: Temperatures 5 to 9° above normal. Highs; low 80s to 90°. Lows; 50° to low 60s. Rain 1 to 4 days. Totals mostly between 1.00 to 1.50 in. north. Central, south mostly under 0.33 in.

Soil moisture mostly short to adequate throughout State. Tobacco transplanting winding down. Corn planting active. Making preparations cotton, peanut planting. Sugarcane making good progress. Trees very good condition. Bloom cycle mostly over, few blocks with open flowers almost finished. Irrigation in use all areas. Early orange harvest almost over. Valencia movement increasing all areas. Seedless grapefruit harvest still very active. Temple, Honey tangerine harvest slowing. Caretakers cutting cover crops, hedging, topping, post bloom spraying. Central, extreme northern areas received welcome showers latter part of week. Tomato transplanting in east coast area is complete, planting in Palmetto/Ruskin area almost complete. Leading vegetable shipments: Tomatoes, potatoes, peppers, strawberries, cabbage. Also available: Snap beans, carrots, celery, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, iceberg lettuce, leaf lettuce, romaine, specialty lettuces, radishes, squash, cherry tomatoes. Pasture feed 5% poor, 40% fair, 55% good. Cattle herds mostly good condition.

GEORGIA: Rain widespread mid to late week. Severe thunderstorms, tornados north 27th with flooding. Rain totals 5.00 to 8.00 in. common north, northwest. Remainder of State mostly 1.00 to 3.00 in. Temperatures 3 to 5° above normal north, 6 to 10° above normal elsewhere. Maximum temperatures 80s, except 70s north, mountains. Coldest temperatures near freezing northeast mountains, 50° south.

Days suitable for fieldwork 5.3. Soil moisture 32% short, 58% adequate, 10% surplus before weekend. Corn 17% fair, 76% good, 7% excellent; planting corn throughout State, corn emerging southern areas; some replanting south possible due to heavy rains. Tobacco 24% fair, 68% good, 8% excellent; 20% transplanted, 5% 1993, 17% avg.; transplanting rapid pace. Wheat 88% jointing, 58% 1993, 79% avg.; 34% boot, 16% 1993, 28% avg.; wheat looking good. Other small grains 12% fair, 88% good. Onions 100% good. Watermelons

40% fair, 54% good, 6% excellent; 32% planted, 16% 1993, 31% avg. Other vegetables 20% fair, 80% good; planting vegetables, laying plastic, spraying for weeds. Apples 11% fair, 89% good; 1% blooming, 1% 1993, 15% avg. Peaches 15% fair, 81% good, 4% excellent; 97% blooming, 79% 1993, 84% avg. Pasture 3% poor, 36% fair, 59% good, 2% excellent; pastures greening up, prior to weekend rain needed some areas. Cattle 20% fair, 78% good, 2% excellent. Hogs 5% fair, 93% good, 2% excellent. Preparing fields for spring planting, fertilizing, spraying pastures, caring for livestock, poultry.

HAWAII: Large high pressure system north of Islands, along with moisture-laden clouds from the tropics, produced high winds, heavy rains during the week, soaking entire island chain. Windward areas hardest hit. Localized flooding several islands. Wet, overcast, cool. Rain 0.35 to 22.70 in. Temperatures low 60s to low 80s.

Spraying activities for insect, disease control curtailed by high wind, wet conditions. Cool, wet, windy conditions slowed crop progress. Banana production declined, leaf shredding, toppled trees by wind to orchards in exposed areas. Papaya output declined, disease incidence higher, some tree losses from standing water. Exposed vine, truck crops adversely affected. Overall damage to agriculture generally minor.

IDAHO: Temperatures 0 to 6° below normal. Precipitation none to 0.36 in. north, none southwest, none to 0.30 in. south central, none to 0.75 in. east.

Days suitable for fieldwork 5. Soil moisture 41% short, 59% adequate. Spring barley planted 8%, 2% 1993, 4% avg. Spring barley emerged 2%, 0% 1993, 1% avg. Oats planted 3%, 0% 1993, 2% avg. Sugarbeets planted 14%, 0% 1993, 10% avg. Onions planted 84%, 0% 1993, 28% avg. Irrigation water supplies 2% very poor, 6% poor, 38% fair, 45% good, 9% excellent. Hay, roughage supplies 82% fair, 18% good. Activities: Planting small grains, sugarbeets, preparing for planting in many areas. Livestock good condition with calving 68% complete, lambing 74% complete.

ILLINOIS: Springtime weather during the first half of the week gave way to cooler temperatures, eventually rain over the weekend. Dry weather was accompanied by breezy conditions that boosted drying, allowed farmers to continue fieldwork. Temperatures normal to above normal. Highs 55 to 65°. Lows 30 to 40°. Precipitation 0.25 to 0.50 in. across the north to over 1.00 in. south.

Farmers continued to monitor their wheat crop as it begins to come out of dormancy. Ground conditions were favorable for tillage during most of the week, farmers in several areas of the State were disking, plowing, seeding oats. A few reports of corn planting in central, south central areas have been received.

INDIANA: Highs 50s or higher, 2° above normal in the south, 4 to 8° above normal in the north. Lows were mid 30s to around 40°, as much as 4° above normal. Precipitation of 0.25 to 0.75 in. was common, with totals closer to an inch across the south. Daily average four-inch soil temperatures were in the low to mid 40s.

Wheat condition fair to good. Hay supplies adequate to good. Livestock remains good. Spring tillage increases daily. Pastures starting to green up. Main activities: Manure hauling, top dressing wheat, spreading fertilizer. Other activities: Purchasing supplies, lime spreading, equipment setup, farm program sign up.

IOWA: Unseasonably warm until midweek, then much colder. Temperatures near normal extreme northwest to 6° above normal east. Extremes 17°; 82°. Occasional light precipitation through the week; light snow by weekend. Precipitation a trace southwest to 0.47 in. extreme southeast; State average 0.07 in. (normal 0.57 in.).

Farmers took advantage of the weather this week making progress in applying fertilizer, tilling, seeding oats.

KANSAS: Temperatures 11° above normal. Precipitation very light, 0.14 in. east central, none west, 0.05 in. or less elsewhere.

Days suitable for fieldwork 6.0. Topsoil 73% short to very short, 27% adequate. Subsurface moisture 18% short to very short, 78% adequate, 4% surplus. Tillage, fertilizing, spraying, planting possible most areas. A few acres dryland corn planted southern areas. Irrigation started on wheat ground, land being prepared for row crops. Wheat jointing 10%, 1% 1993, 5% avg. Above-normal temperatures all week promoted wheat growth. Small, late-planted

wheat sustained light wind damage. Greenbugs, Russian wheat aphids, wheat curl mites present southern areas, light infestations. Diseases mentioned include various types of mosaic, speckled leaf blotch, wheat spindle streak, rust. Farmers spraying mustard west. Almost all areas report short to very short topsoil moisture conditions on a significant percent of acreage. Wheat 55% good to excellent, 42% fair, 3% poor to very poor. Oats planted 90%, 20% 1993, 70% avg. Spring barley planted 85%, 15% 1993, 65% avg. Calving, lambing continue with limited problems, starting to wind down. Movement to spring, summer grazing increasing. Sale barn marketings high because of good weather, higher prices. Pasture, ranges fair to good. However, warm, windy conditions have dried pastures, wildfires have occurred in all regions.

KENTUCKY: Wet, mild week. High temperatures mid 60s, 3° above normal. Low temperatures mid 40s, 5° above normal. Precipitation between 1.50 to 2.50 in.; majority fell on 26th, 27th.

Soil moisture adequate to surplus. Farmers applied fertilizer, prepared, seeded tobacco beds. Some corn planting extreme southern areas. Field activities limited by wet conditions end of week. Fall seeded grains green, showing additional growth with warmer temperatures. Wet muddy conditions stressed livestock.

LOUISIANA: Weather data unavailable.

Days suitable for fieldwork 6.2. Soil moisture supplies 9% short, 89% adequate, 20% surplus. Corn 65% planted, 31% 1993, 42% avg.; 16% emerged, 10% 1993, 16% avg. Made significant progress with excellent weather, soil conditions. Rice 10% planted, 7% 1993, 11% avg.; 3% emerged, 2% 1993, 5% avg. Was active in the southern parishes. Wheat 8% poor, 53% fair, 39% good; 11% headed, 15% 1993, 22% avg. Sorghum 0% planted, 0% 1993, 3% avg. Only a few fields were planted. Spring plowing 57% plowed, 32% 1993, 33% avg. Made excellent progress under ideal weather conditions. Sugarcane 10% poor, 40% fair, 50% good. Off-barring, herbicide spraying continued. Livestock 3% very poor, 7% poor, 57% fair, 31% good, 2% excellent. Tended heifers, young calves. Pasture 13% poor, 7% fair, 75% good, 5% excellent. Vegetables 2% poor, 42% fair, 54% good, 2% excellent. Planting was active in the southeastern parishes.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.00 in., normal 0.87 in. Temperature 49.4°, normal 44.8°. Extremes 21°; 83°.

Activities: Caring for livestock. General farm chores. Machinery maintenance. Fieldwork being delayed due to excessive moisture.

DELAWARE: Precipitation 1.09 in., normal 0.90 in. Temperature 49.5°, normal 45.1°. Extremes 30°; 78°.

Activities: Caring for livestock. General farm chores. Machinery maintenance. Fieldwork being delayed due to excessive moisture.

MICHIGAN: Extremes -4°; 79°. Precipitation 0.15 to 1.54 in. Temperatures were only slightly above normal for the week even though record highs were set at midweek for many locations. Heavy thunderstorms moved into the State early in the week dropping the first spring rain, with light rain falling later in the week.

Livestock were in good condition. Feed supplies remained adequate. Major activities included spreading manure, repairing equipment, spreading fertilizer, attending meetings, auction sales.

MINNESOTA: Temperatures 1 to 5° above normal. Extremes 3°; 69°. Precipitation 0.02 to 0.35 in. below normal for the southern third of the State; west central, near normal; up to 0.22 in. above normal elsewhere. Total precipitation 0.12 to 0.58 in.; maximum 1.12 in. Snowfall 8 in. northwest, northeast, 1 to 3 in. elsewhere. Snow depth at week's end 3 to 8 in. in the northwest and northeast, 1 in. or less elsewhere.

Warm temperatures last week encouraged rye cover crops to come out of dormancy in central Minnesota. Operators are preparing machinery for spring fieldwork, waiting for the soils to dry.

MISSISSIPPI: Weather data not available.

Days suitable for fieldwork 4.8. Soil moisture 3% short, 63% adequate, 34% surplus. Corn 23% planted, 9% 1993, 19% avg.; 4% emerged, 4% 1993, 9% avg.; 70% fair, 20% good, 10% excellent. Watermelons 17% planted, 4% 1993, 15% avg. Wheat 49% jointed, 47% 1993, 63% avg.; 26% fair, 74% good. Hay supply 14% very short, 56% short, 30% adequate. Livestock 19% fair, 77% good, 4% excellent. Pasture 80% of normal. Activities: Land preparation, planting corn.

MISSOURI: Temperatures 5 to 8° above normal, cooler by the end of week. Precipitation for State 0.87 in., ranging from 0.10 in. northwest to 1.87 in. southeast.

Corn plantings began in bootheel. Some reporters still concerned about wheat stands. Farmers applying fertilizers to wheat, other fields for spring crops.

MONTANA: Temperatures ranged from 4° below normal southwest to 9° above normal northeast. Precipitation fell statewide with heavier amounts in northwest, southwest, south-central areas.

Field tillage work in progress 73% none, 17% just started, 10% well underway. Winter wheat 46% dormant, 49% greening, 5% growing. Wind damage to winter wheat 13% none, 54% light, 32% moderate, 1% heavy. Barley 3% planted, 0% 1993, 1% avg. Livestock grazing is 86% open, 12% difficult, 2% closed. Livestock in most regions are receiving supplemental feed. Calving 63% complete, lambing 52% complete.

NEBRASKA: Temperatures near normal. Scattered light precipitation averaged a trace or less.

Producer activities included spring planting preparations, fertilizer applications, some fieldwork, routine chores, livestock care.

NEVADA: Mostly clear, dry first of period followed by cool weather, gusty winds, light precipitation. Clear, dry, much warmer conditions returned by end of period. Temperatures slightly below normal. Extremes 4°; 78°.

Spring fieldwork making progress most areas. Winter grains showing growth. Anticipated irrigation water supplies a major concern in crop planting decisions. Calving, lambing continue, aided by mild weather. Major activities: Irrigation maintenance, spring fieldwork, care, feeding of livestock, general maintenance.

NEW ENGLAND: Precipitation none to 3.20 in. Maximum temperatures 43 to 64° north; 40 to 69° south. Minimum temperatures 10 to 28° north; 9 to 30° south.

Major farm activities: Sugaring going slowly throughout region. Tending livestock. Spreading manure on some fields.

NEW JERSEY: Temperatures above normal. Extremes 25°; 79°. Rainfall 1.37 in. north, 2.13 in. central, 2.75 in. south. Heaviest 24-hour total 1.83 in. on 27th, 28th. Estimated soil moisture, in percent of field capacity: 98% north, 97% central, 93% south. Four-inch soil temperatures averaged 34° north, 44° central, 46° south.

Farmers busy caring for livestock, preparing for spring planting.

NEW MEXICO: Temperatures 3 to 4° above normal in spite of unseasonably cold air that moved in with a winter storm at weekend. Storm over the weekend left between 10 to 20 in. of snow at some locations in the north-central mountains. Higher water equivalents reported were near 1.00 in.

Days suitable for fieldwork 6.3. Soil moisture 74% short, 26% adequate. Crop conditions: Alfalfa 12% poor, 32% fair, 56% good. Irrigated wheat 15% poor, 48% fair, 35% good, 2% excellent. Dryland wheat 38% very poor, 47% poor, 15% fair. Lettuce, onions fair to mostly good; onion transplants still going in. Chile planting active. Cattle, sheep remained poor to good; over 90% in the fair to good category. Range feed condition 59% of normal.

NEW YORK: Temperatures 3 to 9° above normal. St. Lawrence Valley was the warmest, Western Plateau the coolest. Warming trend peaked on 23rd and 24th. Highs were commonly in the 50s to 60s. Precipitation was variable. All of measurable precipitation fell early in the week. After the 22nd it was fairly dry. Any rain or snow that fell after the 22nd was limited to just trace amounts.

Major activities: Tending livestock, maintenance, repairs, moving crops from storage, spreading manure, attending meetings. Producers collecting sap, making maple syrup.

NORTH CAROLINA: Temperatures 3 to 9° above normal. Rainfall 6.96 in. at Andrews to 0.15 in. at Burlington.

Days suitable for fieldwork 5.2. Soil moisture 11% short, 85% adequate, 4% surplus. Crop conditions: wheat 29% fair, 69% good, 2% excellent; oats 2% very poor, 2% poor, 22% fair, 72% good, 2% excellent; barley 25% fair, 73% good, 2% excellent; rye 13% fair, 85% good, 2% excellent; pasture 8% poor, 48% fair, 42% good, 2% excellent; outdoor tobacco plant bed; 38% fair, 62% good; greenhouse tobacco plant beds 9% fair, 80% good, 11% excellent; Irish potatoes; 6% poor, 47% fair, 47% good; peaches 7% poor, 33% fair, 53% good, 7% excellent; truck crops 62% fair, 38% good; hay, roughage supplies 8% very short, 50% short, 42% adequate. Feed

grain supplies 16% very short, 32% short, 71% adequate; tobacco plant supplies 3% very short, 81% adequate, 16% surplus. Irish potatoes planted 67%, 55% 1993, 62% avg.; cabbage transplanted 65%, 57% 1993, 66% avg. Activities included: Topdressing small grains, tobacco plant bed maintenance, preparing land for planting. Other activities included: Tending livestock; equipment repair.

NORTH DAKOTA: Temperatures 1° below normal to 3° above normal. Extremes 2° southwest, south central; 65° south central.

Topsoil moisture significantly above last year at this time. Topsoil moisture 2% short, 66% adequate, 32% surplus compared to 7% short, 79% adequate, 14% surplus last year. Subsoil moisture 5% short, 80% adequate, 15% surplus compared to 5% very short, 45% short, 47% adequate, 3% surplus. Fall-seeded crops were still dormant. Winter wheat 3% poor, 24% fair, 73% good. Calving, lambing were well underway. Calving was 48% complete, lambing 57%, shearing 62%. Calf 17% fair, 78% good, 5% excellent. Lamb 9% fair, 87% good, 4% excellent. Nearly all livestock were receiving supplemental feed because pastures were still dormant. Early pasture 94% of normal. Supplies of hay, forage, grains, concentrates were mostly adequate. Secondary roads were 85% open, 15% difficult; the condition was rated 2% drifted, 2% icy, 64% muddy, 32% dry.

OHIO: Warmer-than-normal weather occurred. Low pressure, a cold front produced showers, thunderstorms by the 25th. Heavy rainfall was reported over the south and east. Highs averaged from the 50s in the north, central to the upper 50s to mid 60s in the south, which was 1 to 6° above normal. Lows 30s in the north, central to the mid 30s to low 40s in the south, which was 1 to 7° above normal. Highest temperatures reached the 70s across the State. Precipitation averaged from 0.13 to 0.70 in. northwest, west central to 0.60 to 2.00 in. over the east, south. Soil temperatures at the 4.-in. depth under sod averaged mostly in the low to mid 40s across the State.

Winter wheat has been reported as generally good with some greening in various locations. Plowing, discing has started in some localities with topdressing of fields.

OKLAHOMA: Temperatures 1° above normal north-central, west central districts to 6° above normal southeast district. Precipitation 0.01 in. Panhandle to 1.15 in. northeast district.

Topsoil moisture 25% short, 68% adequate, 7% surplus. Subsoil moisture 25% short, 75% adequate. Wheat 6% poor, 25% fair, 63% good, 6% excellent; 44% jointing, 32% 1993, 40% avg. Sorghum 25% seedbed prepared, 7% 1993, 28% avg.; 1% planted, 0% 1993, 1% avg. Cotton 37% seedbed prepared, 48% 1993, 34% avg. Feeders \$1.00 to \$2.00 lower.

OREGON: Temperatures near normal western locations; 2 to 7° below normal eastern locations. Precipitation coastal areas 1.50 to 2.00 in., Willamette Valley 0.75 to 1.00 in., elsewhere up to 0.10 in. Several feet of snow fell, Cascades; still not up to normal snowpack.

Soil moisture: 23% short, 73% adequate, 4% surplus. Winter wheat 3% poor, 21% fair, 60% good, 16% excellent. Barley planted 36%. Fertilizer, herbicides being applied to small grain crops. Russian wheat aphids reported some lower elevations, no disease problems; Columbia Basin. Spring wheat seeding winding down, Columbia Basin. Sugarbeet planting continues, Malheur County. Mint, hay fields slowed, cold dry conditions; central areas. Peaches, prunes, apricots blooming. Sweet cherries, tart cherries, plums near bloom stage; hazelnuts in catkin stage, canberries in bud stage; Willamette Valley. Frost protection used Medford district pears, no damage. Severely marked winter pears expected, Hood River district. Onion, potato planting underway, Malheur County. Columbia Basin green peas 40% planted. Livestock good to excellent. Range, pasture 92% of normal. Lambing and calving winding down statewide, excellent conditions. Plentiful feed in grass seed fields, sheep; western areas. Livestock producers starting to brand.

PENNSYLVANIA: Two significant weather systems affected the Commonwealth: a low pressure system early in the week, and a high pressure system during the midweek period. Low pressure system brought generous rainfall. High pressure brought a first taste of spring-like temperatures. Temperature 45°, 8° above normal. Extremes 19° Hawley; 77° Philadelphia. Average precipitation 1.14 in., 0.33 in. above normal.

Activities: Hauling manure; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall 0.10 in. was 0.50 in. below normal. Highest rainfall 1.28 in. at San Sebastian, 1.19 in. at Arecibo Ionos. Obs, 0.77 in. at Dos Bocas. Highest 24-hour total 1.13 in. at San

Sebastian. Island temperatures 76 to 78° on coasts, 70 to 72° interior with mean station temperatures 79.6° at San Juan WSFO to 64.2° at Cerro Maravilla. Extremes 51°; 91°.

SOUTH CAROLINA: Temperatures 2 to 4° above normal. Rainfall averaged 1.00 in.

Days suitable for fieldwork 5.2. Soil moisture 3% very short, 30% short, 64% adequate, 3% surplus. Tobacco fair to good; 1% planted, 0% 1993, 0% avg. Corn fair to good; 32% planted, 9% 1993, 17% avg. Cantaloupes fair to good; 15% planted, 6% 1993, 8% avg. Watermelons fair to good; 21% planted, 9% 1993, 18% avg. Cucumbers fair to good; 15% planted, 20% 1993, 16% avg. Snapbeans fair to good; 15% planted, 27% 1993, 15% avg. Pastures fair.

SOUTH DAKOTA: Temperatures normal to 5° below normal. Extremes -3°; 71°. Precipitation midweek through late week. Normal to above normal northwest, north-central, below normal remainder. Maximum 1.25 in. west central.

Calving, lambing well underway in many areas. Some secondary roads broken up from spring thaw. Other farm activities: General livestock care, hauled grain, prepared equipment for fieldwork, secured seed supplies.

TENNESSEE: Temperatures were mild, generally a few degrees above normal. Highs were in the 60s, average lows in the 40s. Rainfall was heavy statewide. Amounts in excess of 4.00 in. were common. Parts of east had weekly totals between 5.00 to 10.00 in.

Fieldwork was once again limited because of soaking rains. Most areas report surplus soil moisture levels, putting fieldwork further behind schedule. Wheat mostly fair condition. Livestock are in good condition.

TEXAS: High pressure, southerly air flow from Gulf of Mexico produced warm, humid conditions. Consequently, mean temperature was above normal. Departures 1° Low Rolling Plains to 7° Edwards Plateau, East Texas, Southern Texas. Most divisions had departures 4 to 6°. Precipitation was below normal across State, except for Southern Texas (+0.09 in.), which received thunderstorms on 19th, 20th. Most departures were between -0.09 to -0.25. Some of larger station totals were 1.48 in. at San Antonio, 1.44 in. at Waco. Mean soil temperature last week was in the upper 60s to low 70s. Range of mean soil temperature 50° Bushland to 77° at Corpus Christi. Highest daily soil maximum temperature 86° at Beeville, Weslaco, while lowest daily minimum soil temperature was 35° at Bushland.

Crops: Corn land preparation was winding down in Plains, where producers were irrigating, applying herbicides in preparation for planting. A few fields in Southern High Plains were planted. Planting should begin in earnest soon. Planting was moving into final stages from South Central Texas to Rio Grande Valley. In Blacklands, planting was winding down. Early-planted fields made good progress. Corn 75% normal. Sorghum land preparation resumed in Plains, planting should begin soon. Planting was beginning to wind down in many areas of southern part of Texas. Sorghum 70% normal. Cotton soil crusting on newly-planted cotton ground required picker wheel work in Rio Grande Valley, where planting continued to be active. Planting was active in Coastal Bend, South Texas. Herbicides were applied in the Plains where conditions allowed. Some areas of Southern Low Plains need more moisture before dryland planting can begin. Producers in Trans-Pecos were bedding ground in anticipation of planting. Soil temperatures were still a little cool for planting cotton from mid-section to northern areas of State. Rice planting was active in South Central Texas, along Upper Coast. Small grains condition showed improvement in some areas of State because of milder temperatures, more rain is needed. Fields in Plains were being top-dressed, treated for greenbugs, brown wheat mites, russian aphids as conditions permitted. In Edwards Plateau, some oat fields were being grazed out. Wheat 65% normal, 76% 1993.

Commercial Vegetables: Rio Grande Valley harvest of carrots, onions, grapefruit continued. Watermelons, peas made good progress. High Plains land preparation resumed and onion planting continued. San Antonio Winter Garden planting of watermelons continued, some existing stands of watermelon made good progress. East Texas sweet potatoes were bedded out. Planting of tomatoes, peppers, squash, cucumbers, melons was active in many areas. Land preparation continued. Trans Pecos some producers were planting cantaloupes, chili peppers. Onions were doing well. Peaches growers continued to survey damage from earlier freeze. Trees were either blooming or in petal fall stage. Producers continued to apply

insecticides, fungicides. Pecans producers applied fertilizer to commercial orchards in Trans Pecos.

Range and Livestock: Livestock remained in fair to good condition across State. Supplemental feeding decreased in many areas, was no longer needed in some areas as a result of improved grasses, weeds. However, in many areas of Southern Low Plains pastures were in need of moisture. Hay fields were being fertilized in East Texas. Calving was well under way in Blacklands. Shearing of sheep was winding down in Trans-Pecos. Coastal Bermuda sprigging was active in Edwards Plateau. Cattle market remained strong.

UTAH: Maxima 1° above normal, minima 4° above normal. Precipitation light in Uintah Basin, Southeast division, moderate to heavy across the rest of the State.

Major farm, ranch activities were: preparing seedbed, planting, fruit pruning, planting onions, repairing machinery, preparing records, income taxes, feeding, caring for livestock, repairing fences. Extreme damage to apricot buds due to cold weather.

VIRGINIA: Temperatures much above normal. Extremes 26°; 83°. Precipitation was near normal.

Days suitable for fieldwork 3.3. Topsoil moisture 77% adequate, 23% surplus. Barley 1% poor, 77% fair, 22% good. Wheat 2% poor, 71% fair, 27% good. Oats 7% very poor, 16% poor, 59% fair, 18% good. Pasture 17% poor, 52% fair, 31% good. Alfalfa hay 5% poor, 44% fair, 51% good. Peaches 55% very poor, 10% poor, 12% fair, 23% good. Apple 29% fair, 71% good. Tobacco plantbeds 85% seeded. Plantbed 7% poor, 44% fair, 49% good. Tobacco greenhouse seeding was 93% completed. Greenhouse 28% fair, 62% good, 10% excellent. Potato planting was about 55% completed. Topdressing small grains, fertilizing, liming corn, soybean land, overseeding pastures, pruning, spraying fruit trees.

WASHINGTON: Temperatures 2 to 5° below normal west; 7° below normal to normal east. Precipitation 0.30 to 1.38 in. west; none to 0.54 in. east.

Days suitable for fieldwork 5.0. Soil moisture 45% short, 45% adequate, 10% surplus. Hay, other roughage supplies 15% short, 80% adequate, 5% surplus. Range, pasture 5% very poor, 35% poor, 40% fair, 20% good. Winter wheat dryland 4% very poor, 6% poor, 33% fair, 54% good, 3% excellent; irrigated 3% fair, 87% good, 10% excellent. Barley dryland 8% very poor, 10% poor, 74% fair, 8% good; irrigated 12% fair, 88% good. Cold, wet weather early in the week gave way to warmer weather by midweek. Spring fieldwork was underway in most areas. Winter grains were starting to green up, as were hay stands and pastures. Berries were beginning to bud and early fruits were beginning to bloom. Frost protection in orchards was extensive, some freeze damage was reported in the lower Yakima Valley. Orchardists were also busy with dormant sprays and pest control. Branding was underway as weather permitted.

WEST VIRGINIA: Temperature 49°. Extremes 22°; 84°. Average precipitation 2.52 in. Temperatures 4 to 7° above normal. Precipitation 1.40 in. above normal in the northeast region to 2.22 in. above normal in the southwest region.

Farm activities: cultivating, calving, lambing, feeding livestock, bookkeeping, general maintenance.

WISCONSIN: Temperature 37°. Extremes 2°; 74°. Late March frost depth 6.6 in., 17.7 1993, 10.7 avg. Late March snow depth 0.10 in., 3.9 1993, 4.1 32-yr avg.

Weather conditions have moved a lot of frost out of the soil, the top surface is generally thawed in most areas. Fieldwork remains on hold because of wet soils, cold soil temperatures.

WYOMING: Temperatures above normal across most of the State. Archer 9° above normal; Diversion Dam 3° below normal. Most areas received below normal precipitation. Exception was a swath from the southwest corner to the northeast foothills which were above normal. Evanston received the largest amount of precipitation with 0.75 in.

Days suitable for fieldwork 3.0. Topsoil moisture 7% short, 90% adequate, 3% surplus; last week 92% adequate, 8% surplus. Spring wheat planted 4%, last week 1%. Oats planted 10%, last week 2%. Barley planted 41%, last week 27%. Condition of all livestock 83% good, 17% excellent. Spring calves born 57%, last week 47%. Calf death losses 35% light, 65% normal; last week 47% light, 53% normal. Farm flock: ewes lambled 71%, last week 61%; shorn 70%, last week 68%. Range flock: ewes lambled 9%, last week 8%; shorn 27%, last week 22%. Lamb death losses 18% light and 82% normal, last week 32% light and 68% normal. Stockwater supplies 100% adequate.

International Weather and Crop Summary

HIGHLIGHTS

March 20 - 26, 1994

FSU-WESTERN: Unusually warm weather in Ukraine and North Caucasus, Russia promoted further greening of winter grains.

EUROPE: Dry weather continued across the south.

SOUTH ASIA: Continued warm weather was unfavorable for immature winter crops.

SOUTHEAST ASIA: Unseasonably heavy rain increased reservoir levels throughout Thailand's rice and corn areas.

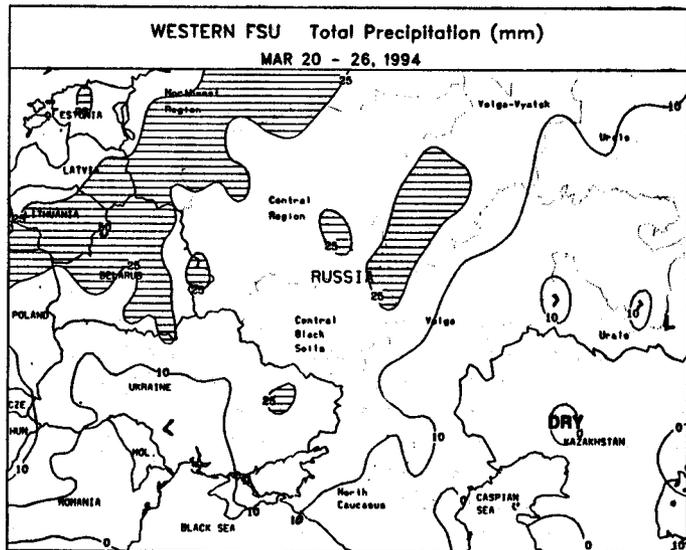
EASTERN ASIA: Warm weather stimulated early winter wheat growth across the North China Plain.

AUSTRALIA: Dry weather continued to favor summer crop harvesting across eastern Australia.

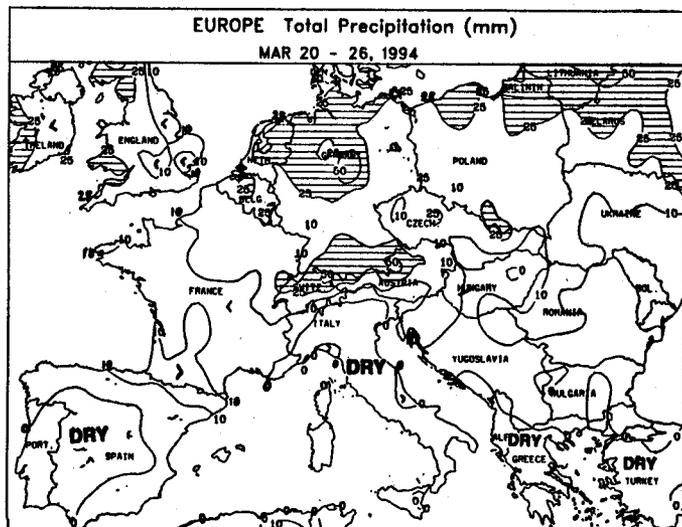
SOUTH AMERICA: In central Argentina, rain aided immature soybeans, but additional moisture is still needed. Across southern Brazil, showers slowed soybean harvesting.

NORTHWESTERN AFRICA: Dry weather stressed winter grains entering reproduction.

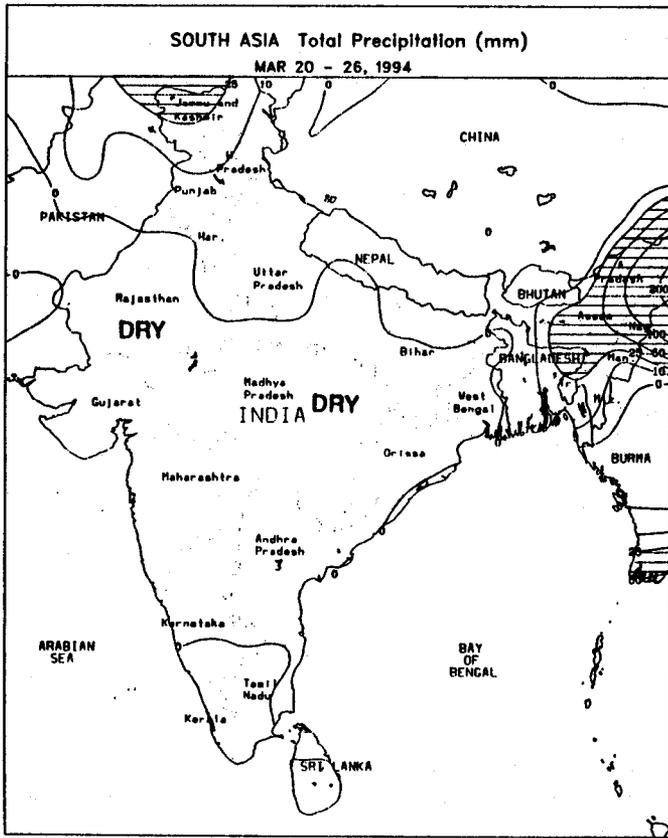
SOUTH AFRICA: Mostly dry, warm weather across the region benefited filling to maturing summer crops.



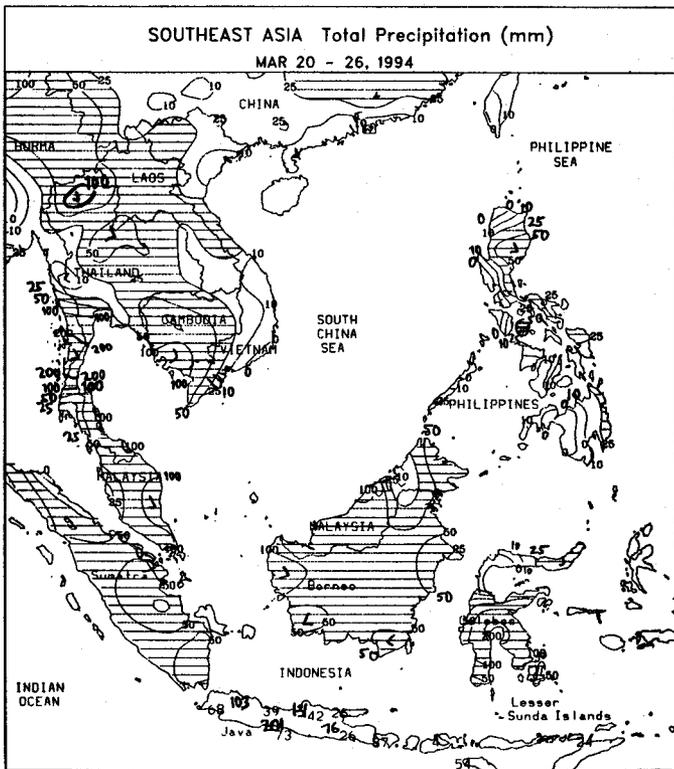
FSU-WESTERN: Unseasonably warm weather covered most of the region, melting snow cover and prompting early-season fieldwork in the south. Weekly average temperatures were 2-4 degrees Celsius (C) above normal over most areas. Snow cover continued to retreat northward and eastward, but still remained over the Baltic States and most of Russia (Northwest Region, Central Region, Volga Vyatsk Region, Central Black Soils Region, and upper Volga Valley). In Ukraine and North Caucasus, Russia, winter grains were beginning to break dormancy and early-season fieldwork was underway. Light to moderate precipitation (10-25 mm, with local amounts in excess of 25 mm) covered Russia, eastern and northern Ukraine, Belarus, and the Baltic States. Rain is needed in Moldova and southern Ukraine, where below-normal precipitation since the fall has limited moisture for the upcoming growing season.



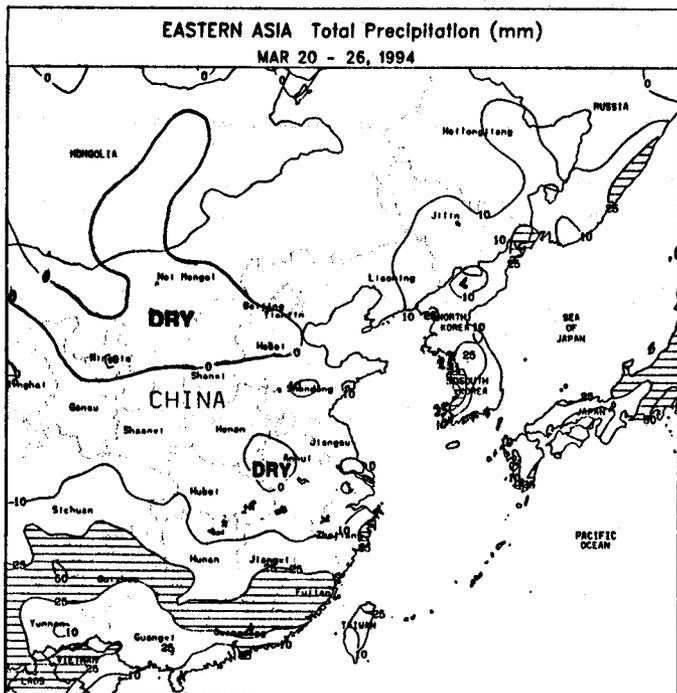
EUROPE: Although widespread rain (10-25 mm, with local amounts in excess of 25 mm) continued to fall from the United Kingdom across Germany to Poland, rainfall was less than last week's. Unseasonably warm weather (weekly average temperatures of about 2 degrees C above normal) accompanied the rain, stimulating greening of wheat. Light rain (around 10 mm) fell over southwestern France, increasing topsoil moisture for corn planting which begins in April. Dry weather persisted from the Iberian peninsula through Italy's Po Valley into Greece. In addition, weekly average temperatures ranged from 2 to 4 degrees C above normal in these areas, further aggravating low moisture supplies for spring growth. In Romania and Bulgaria, persistent dryness was accompanied by unseasonably warm weather. Rain is needed in these areas for winter grains breaking dormancy and for spring crop planting.



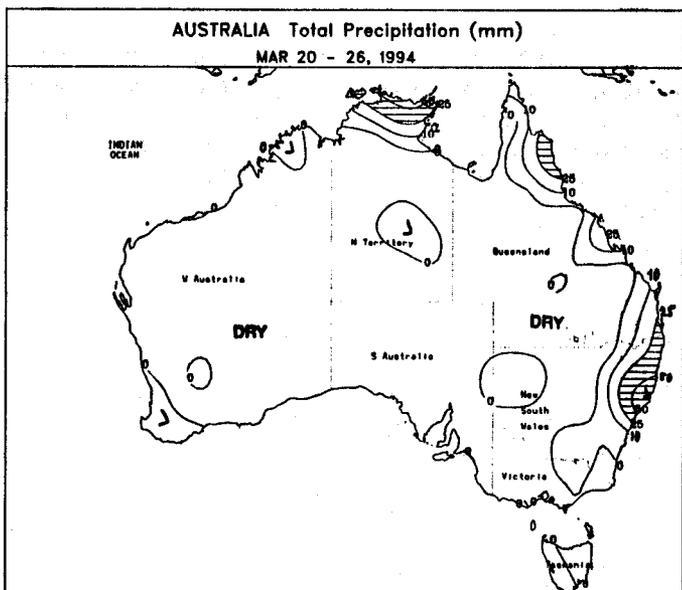
SOUTH ASIA: Dry, warm weather dominated primary winter crop areas of Pakistan and India. Although conditions favored crop drydown and harvests in central India, temperatures in the mid 30's C were unfavorable for immature crops in the north. Light rain (10-22 mm) increased irrigation reserves in northern Pakistan, while further east, moderate to heavy showers (39-180 mm) covered rice areas east of Bangladesh.



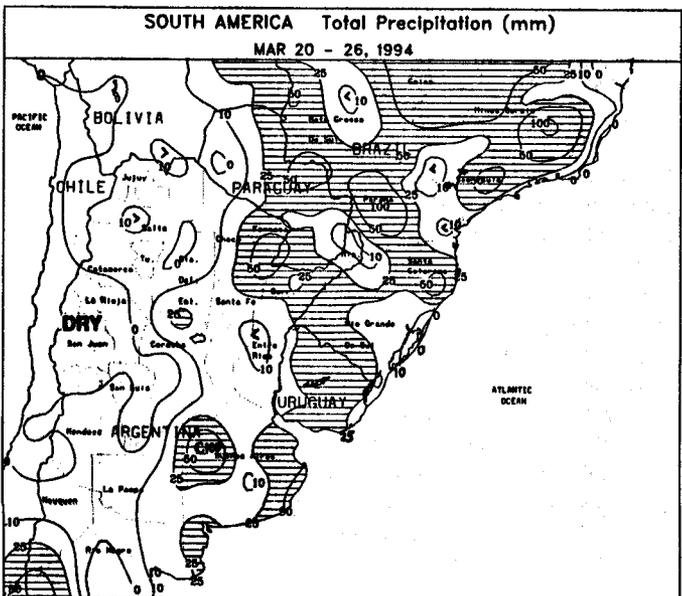
SOUTHEAST ASIA: Unseasonably heavy rain (25-100 mm or more) fell throughout Thailand's primary grain areas. The rainfall boosted critically low reservoir levels and helped reduce heat stress on second-crop rice. Main-season grain planting usually begins in mid- to late-April. Further south, moderate to heavy rain (50-100 mm or more) covered large sections of peninsular Thailand, Malaysia, and Indonesia. The continued heavy showers likely caused additional flooding in Java's western rice areas. In the Philippines, scattered showers (10-25 mm, with local totals exceeding 50 mm) increased topsoil moisture for rice and corn planting. Main-season grain planting ranges from April to May throughout the islands.



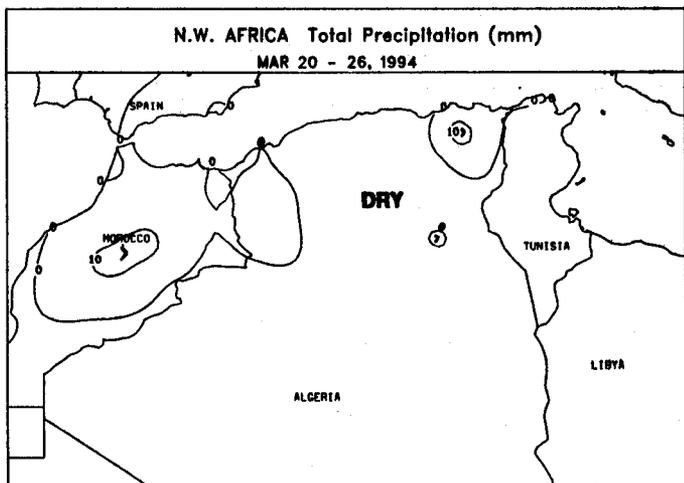
EASTERN ASIA: Seasonably warm, dry weather prevailed across the North China Plain, stimulating early winter wheat growth. Typically, rainfall increases during April across the wheat belt and soil moisture provides the crop with needed moisture until then. In most areas soil moisture is adequate. Temperatures averaged near normal across most crop areas.



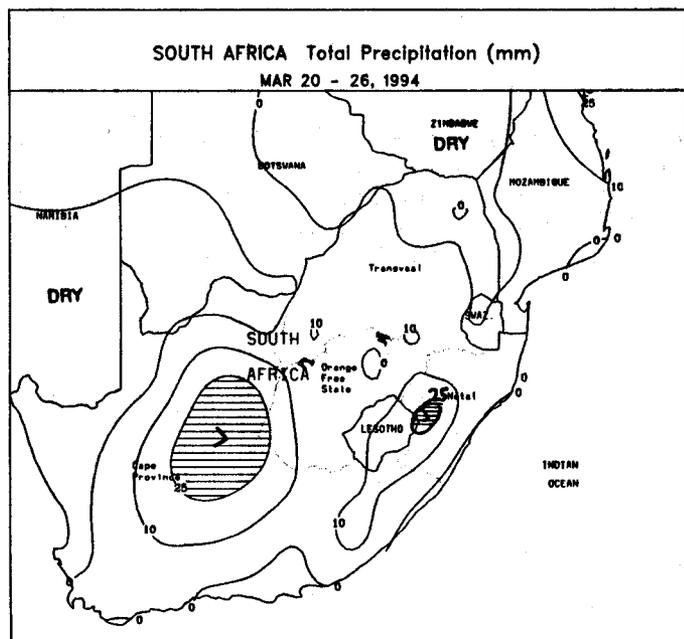
AUSTRALIA: Dry weather continued across the eastern summer crop areas, favoring main-season cotton and sorghum harvesting. Temperatures averaged 3-4 degrees C below normal across the east. Variable showers (5-30 mm) fell across the northeast coast of Queensland, aiding sugarcane.



SOUTH AMERICA: In central Argentina, light rain (8-20 mm, with isolated amounts greater than 100 mm) continued to aid immature soybeans. However, additional rain is still needed. Heavier rain (13-40 mm) fell across southern Buenos Aires, slowing sunflowerseed harvesting. Moderate to heavy showers (22-75 mm) continued to interfere with northern cotton harvesting. Temperatures averaged 1-2 degrees C above normal across central Argentina. In southern Brazil, scattered showers (10-40 mm, with isolated amounts greater than 100 mm) caused only minor fieldwork delays across the central and southern crop areas. In southern Mato Grosso, Goias, and Minas Gerais, moderate to heavy showers (40-100 mm) slowed summer crop harvesting. Temperatures averaged 1-2 degrees C below normal across the southern crop areas and near normal elsewhere.



NORTHWESTERN AFRICA: Unseasonably warm weather accompanied little, if any, precipitation over winter grain areas in Morocco, Algeria, and Tunisia. Extreme maximum temperatures ranged from 23 to 30 degrees C over these areas, increasing crop-water use. Although rainfall (less than 10 mm) over Morocco was insufficient to meet the increasing crop-moisture requirements of winter grains in the reproductive phase of development, adequate soil moisture reserves favored continued growth. In contrast, persistent dryness in most of Algeria and Tunisia limited soil moisture. As a result, this past week's warm, dry weather negatively affected winter grains in these areas, lowering yield potential.



SOUTH AFRICA: Light rain (10 mm or less, with isolated reports of 12-35 mm) and somewhat warmer-than-normal weather dominated the region. Dryness since the beginning of March has been favorable for filling to maturing grains, although sugarcane regions have experienced below-normal rainfall for much of the season and could have benefited from additional rain.

(Continued from front cover)
were established in the interior Northwest. On Tuesday, Yakima, WA measured 17°F. A day later, Boise, ID recorded 19°F. Temperatures fell nearly to the freezing mark as far south as Sacramento, CA (33°F). In contrast, more than 30 daily record highs were set in the South-Central and Eastern States during the week, nearly half of which occurred on Wednesday. Temperatures soared to 80°F as far north as Baltimore, MD and Roanoke, VA. In the central Plains, wind gusts of up to 40 miles per hour accompanied temperatures in the 70's and 80's. On Thursday, a fast-moving cold front delivered cooler weather east of the Rockies and pushed a band of thunderstorms across the Southeast. Local rainfall topped 2 inches from the central Gulf Coast States to western South Carolina. Meanwhile, a major storm system dropped southward along the California

coast and pushed inland over the Southwest. In southern California, snow depths reached 8 inches in Wrightwood and atop Mt. Laguna. Red River, NM collected 17 inches. Lowland rainfall included 1.37 inches in San Diego, CA and 0.64 inches in Phoenix, AZ. Mid- to late-week rain also struck the Hawaiian Islands, where Honolulu received more than 3 inches in 3 days, and Hilo amassed 12.40 inches during the same Wednesday-to-Friday period. On Saturday, heavy rain quickly developed from southeastern Kansas and eastern Oklahoma east-northeastward. Amounts exceeded 2 inches from the Ouachita Mountains to the central and southern Appalachians, with imbedded 4- to 6-inch totals in the Tennessee Valley, causing widespread flash flooding. Elsewhere, warmth returned to the Northwest, where Salem, OR notched a daily record high (74°F).

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Vilhelm Bjerknes Retires

Thirty-seven year government service veteran Vilhelm Bjerknes will retire on April 1, 1994. The Joint Agricultural Weather Facility (JAWF) staff will sorely miss his weather expertise and biting Scandinavian sense of humor.

Vilhelm was born in Bergen, Norway on 13 June, 1931, and arrived in the United States in August 1939. After averaging about one school per year during grade school, Vil settled into a chemistry curriculum at UCLA. He later switched majors, graduating with a meteorology degree in 1956.

Vil immediately embarked on a career with the U.S. Air Force, and had tours of duty in Frankfurt, (West) Germany and London, England, as well as St. Louis, MO, Hampton, VA, and Suitland, MD. He left the Air Force as a captain in 1972, and joined the National Weather Service's (NWS) Communications Division in Suitland. Six years later, Vil transferred to the NWS' Climate Analysis Center, where he spent about 10 years with the Analysis and Information Branch in Camp Springs, MD. In January 1988, he joined JAWF in Washington, DC, where,

among other duties, Vil monitored weather conditions in Europe, northwestern Africa, and the former Soviet Union.

With Vil's retirement, a three-generation run of meteorologists apparently comes to an end. Although Vil has two sons, aged 25 and 29, neither professes an interest in the weather. Vil's father, Jacob Bjerknes (1897-1975), was involved in early research that led to a better understanding of the El Niño/Southern Oscillation phenomenon and ocean/atmosphere interactions. His grandfather, Vilhelm Bjerknes (1862-1951), was among those who created the Bergen School of Meteorology, where for the first time scientists tried to apply the laws of physics to the atmosphere. Atmospheric scientists at Bergen, among them Jacob Bjerknes, devised the "Norwegian Cyclone Model" in the late 1910's and 1920's, a conceptual model of mid-latitude storm systems that is still taught in universities today.

Vil and his wife, Inger, will continue to reside in the Maryland suburbs of Washington, DC, and travel as her work schedule permits.

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